LG AIRCONDITIONER ENGINEERING PRODUCT DATA BOOK

PTAC Type

(60Hz/R410A)

6RWU0-05A

LG
Life's Good

Introduction

Part 1 General information

Part 2 Product data

Part 3 Design and installation

Part 4 Accessories

Test condition of International Standards

CLASSIFICATION			KSC 9306	ISO 5151	AHRI 210/240	AHAM	AS 1861.1	SSA 385
Cooling Capacity	Indoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	27.0	29.0
		WB°C(°F)	19.5	19.0	19.4(67)	19.4(67)	19.0	19.0
	Outdoor	DB°C(°F)	35.0	35.0	35.0(95)	35.0(95)	35.0	46.0
		WB°C(°F)	24.0	24.0	23.9(75)	23.9(75)	24.0	24.0
Heating Capacity	Indoor	DB°C(°F)	20.0	20.0	21.1(70)	21.1(70)	21.0	21.0
		WB°C(°F)	15.0	15.0	15.6(60)	15.6(60)	15.0	15.5
	Outdoor	DB°C(°F)	7.0	7.0	8.3(47)	8.3(47)	7.0	7.0
		WB°C(°F)	6.0	6.0	6.1(43)	6.1(43)	6.0	6.0
Maximum Cooling Operating	Indoor	DB°C(°F)	32.0	32.0	26.7(80)	32.2(90)	32.0	29.0
		WB°C(°F)	23.0	23.0	19.4(67)	22.8(73)	23.0	19.0
	Outdoor	DB°C(°F)	43.0	43.0	46.1(115)	43.3(110)	43.0	54.0
		WB°C(°F)	26.0	26.0	23.9(75)	25.6(78)	26.0	24.0
Maximum Heating Operating	Indoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	-	-
		WB°C(°F)	19.0	19.0	19.4(67)	22.8(73)	-	-
	Outdoor	DB°C(°F)	21.0	24.0	23.9(75)	23.9(75)	-	-
		WB°C(°F)	15.0	18.0	18.3(65)	18.3(65)	-	-
Enclosure Sweat / Condensate Disposal	Indoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	27.0	27.0
		WB°C(°F)	24.0	24.0	23.9(75)	23.9(75)	24.0	24.0
	Outdoor	DB°C(°F)	27.0	27.0	26.7(80)	26.7(80)	27.0	27.0
		WB°C(°F)	24.0	24.0	23.9(75)	23.9(75)	24.0	24.0
Freeze-up/ Low Temperature	Indoor	DB°C(°F)	21.0	21.0	19.4(67)	21.1(70)	21.0	21.0
		WB°C(°F)	15.0	15.0	13.9(57)	15.6(60)	16.0	16.0
	Outdoor	DB°C(°F)	21.0	21.0	19.4(67)	21.1(70)	21.0	21.0
		WB°C(°F)	15.0	15.0	13.9(57)	15.6(60)	16.0	16.0

KS : Korea Standard
ISO : International Standard Organization
AHRI : Airconditioning, Heating & Refrigeration Institute
AHAM : Association of Home Appliance Manufacturers
AS : Australia Standard
SSA : Saudi Arabian Standard

In the table above, temperatures are expressed in Fahrenheit(°F) within parentheses only for ARI and AHAM standards.

Introduction

Preface

Packaged Terminal Air-Conditioners(PTAC) of LG is the best choice a customer can avail when it comes to a quiet environment. Ultra quiet operation is the hallmark of these Air-Conditioners of LG. This range of units is suitable for Hotels and Healthcare applications. These units have extremely low noise levels and outstanding sound prevention ratings. Moreover, these units have higher Energy ratings which results in excellent energy savings.

These units are also provided with unique features to provide better usability and easy installation for the user.

The capacity of these PTAC models ranges from 7,000 Btu/h to 15,000 Btu/h.

Some of the important features of this unit are as follows:-

Long term money saving: By providing features such as Gold Fin etc... to maintain the same performance throughout the life of the Air-Conditioner.

Comfort : With features such as Wall Thermostat temperature control, Auto Restart, etc…, which gives ultimate comfort to our customer.

These units are equipped with many standard and optional features for our customers. For details, please refer to the detailed specification following this description.

LG Electronics Inc.

Air Conditioning & Energy Solution Company

Publication History

Pub. No.	Frequency	Category	Product name	Refrigerant	Notes	Published in
6RWU0 - 01A	60Hz	RAC	PTAC	R410A	New Edition of PDB	Apr.2010
6RWU0 - 01B	60Hz	RAC	PTAC	R410A	Spec sheet update	June.2010
6RWU0 – 01C	60Hz	RAC	PTAC	R410A	Spec sheet update	August. 2010
6RWU0 – 01D	60Hz	RAC	PTAC	R410A	Add Operation range	Dec. 2010
6RWU0 – 02A	60Hz	RAC	PTAC	R410A	2011 New line-up update	Apr. 2011
6RWU0 – 02B	60Hz	RAC	PTAC	R410A	Modified Capacity Table	Apr. 2012
6RWU0 – 02C	60Hz	RAC	PTAC	R410A	Spec Sheet Update	Apr. 2012
6RWU0-03A	60Hz	RAC	PTAC	R410A	2013 Model Line Up	Mar, 2013
6RWU0-03B	60Hz	RAC	PTAC	R410A	Update additional accessories	Jun,2014
6RWU0-04A	60Hz	RAC	PTAC	R410A	2016 Model Line UP	Jun,2016
6RWU0-04B	60Hz	RAC	PTAC	R410A	Spec Sheet Update	Feb,2017
6RWU0-05A	60Hz	RAC	PTAC	R410A	2017 Model Line UP	Aug,2017
6RWU0-05B	60Hz	RAC	PTAC	R410A	Spec sheet update (add gross weight)	Nov,2017

Step by step air conditioner selection process (reference)

(1) **Calculate or obtain the maximum heat load for the area to be air conditioned.**

(2)

Specifications

Model features and functions

Air-flow and temperature distribution

(3)

Selection of the control system

Remote Wall Thermostat Control

Front Desk Control

⚠CAUTION

1. Air conditioners should not be installed in areas where corrosive gases such as acid gas or alkaline gas are present.

Note :
Here in this PDB, the temperature units are generally expressed in Fahrenheit (°F) but for specific regions please conform to local standards whenever necessary.

Part 1 General information

1. Model line up

Chassis	Model names			
	Capacity, kW(kBtu/h)			
	2.05(7)	2.64(9)	3.52(12)	4.4(15)
YA	UYC073ALEU1(LP073CDUC) UYH073ALEU1(LP073HDUC)	UYC093ALEU1(LP093CDUC) Y4NZ09ANLD1(LP093HDUC1) UYC09EALE31(LP096CD3B) UYH09EALE31(LP096HD3B)	UYC123ALEU1(LP123CDUC) Y4NZ12ANLD1(LP123HDUC1) UYC12EALE31(LP126CD3B) UYH12EALE31(LP126HD3B)	UYC153ALEU1(LP153CDUC) UYH153ALEU1(LP153HDUC)

2. Nomenclature

Global standard

[New version]

Model Development serial number.

Function

A	2kW~5kW (Universal Heater)	Fan Mode + Auto Restart + Evaporator Frost Control + Freeze Room Protection + 4-Way Cooling
B	2kW	
C	3kW	
D	2kW~5kW (Universal Heater)	Fan Mode + Auto Restart + Evaporator Frost Control + Freeze Room Protection + 4-Way Cooling + Target Temp. display
E	2kW	
F	3kW	
G	2kW~5kW (Universal Heater)	Fan Mode + Auto Restart + Evaporator Frost Control + Freeze Room Protection + 4-Way Cooling + Condensate Pump
H	2kW	
J	3kW	

Look
L: LG Brand

Production type
N: In house
S: Outsourcing

Chassis : A – YA chassis.

Capacity
Ex) 07 -> 7,000 Btu/h Class

Operation type
C: C/O
H: H/P
Q: DC Inverter C/O
W: DC Inverter H/P
M: DC Inverter H/P Multi-Compatible
X: C/O + E/Heater
Z: H/P + E/Heater

Set Type
N: Indoor unit
M: Mock-up

Production Center, Refrigerant
2: R22
3: R32
4: R410A

Product
W: Window Air Conditioner
Y: Packaged Terminal Air Conditioner
X: Through the Wall Air Conditioner
E: Casement Air Conditioner
U: SPVU Air Conditioner
L: Console Air Conditioner
Q: Low Profile Air Conditioner
P: Portable Air Conditioner

Note : The old version Nomenclature at the page 83 of this book.

3. Appearance

Chassis	Unit	Models
YA		UYC073ALEU1(LP073CDUC) UYH073ALEU1(LP073HDUC) UYC093ALEU1(LP093CDUC) Y4NZ09ANLD1(LP093HDUC1) UYC09EALE31(LP096CD3B) UYH09EALE31(LP096HD3B) UYC123ALEU1(LP123CDUC) Y4NZ12ANLD1(LP123HDUC1) UYC12EALE31(LP126CD3B) UYH12EALE31(LP126HD3B) UYC153ALEU1(LP153CDUC) UYH153ALEU1(LP153HDUC)

4. List of functions

Category	Function	PTAC Type Cooling only Models	PTAC Type Heat Pump Models
Air flow	Air discharge type	Top discharge	Top discharge
	Airflow direction control (up & down)	Manual	Manual
	Airflow direction control (left & right)	-	-
	Auto swing	-	-
	Airflow steps (fan/cool/heat)	2/2/2	2/2/2
	Airflow Direction	2 way	2 way
Air purifying	Deodorizing filter	-	-
	Plasma air filter	-	-
	Air filter (washable / anti-fungus)	O	O
Installation	Electric heater (operation)	O	O
Reliability	Hot start	-	-
Convenience	Auto restart operation	O	O
	Micom control	O	O
	Air ventilation	O	O
	Forced operation	-	-
	Sleep mode	-	-
	Timer	O	O
Individual control	Wired remote control	O	O
	Wireless remote control	O	O
Others	Energy save mode	O	O
	Thermistor	O	O

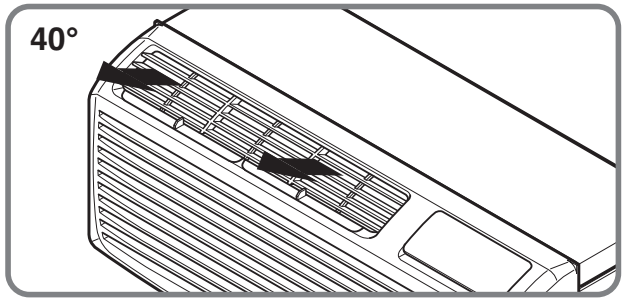
O : applied
- : not applied

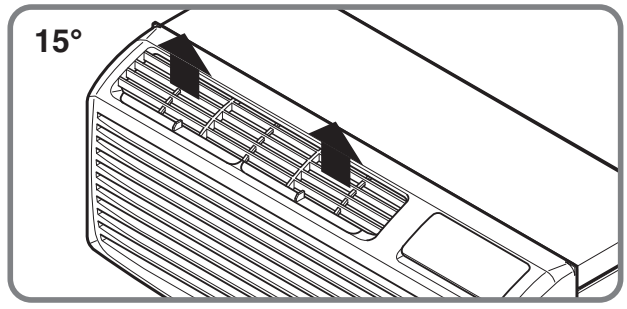
5. Features

The following features can be found in PTAC (Packaged Terminal Air-Conditioners) :-

- **2 -Way Air Flow Direction**
- **Washable Filters**
- **Low Noise at High Air Volume**
- **High Efficiency Compressor**
- **Energy Saver Mode**
- **Timer**
- **Electric Heater**
- **Defrost Control**
- **Air Ventilation**
- **Energy saving Anti-corrosion treated Fins**
- **Infinite Impulse Response(IIR)**
- **Compressor Restart Delay**
- **Fan Only Setting**
- **Indoor Fan Speed Setting**
- **Two Fan Motors**
- **LED Diagnostics and Self Diagnostics**
- **Indoor Room Freeze Protection**
- **Compressor Overload Protection**
- **Outdoor Air Temperature Switchover**
- **Temperature Limits**
- **Condensate Drain Valve**
- **Quick Heater Recovery**
- **Reverse Cycle Defrosting (PTHP's only)**
- **High Temperature Heat Pump Operation Protection**
- **Remote Thermostat Control**
- **Slinger Technology**

2 -Way Air Flow Direction

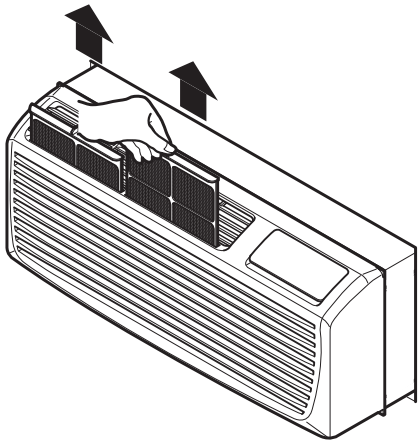


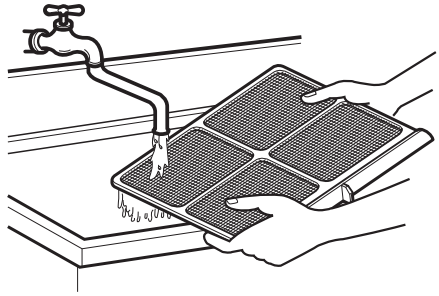


Air Flow can be adjusted by changing the direction of the air conditioner's louvers at an angle of 15-40° off vertical to attain the desired level of comfort and convenience. This can also increase the cooling efficiency of the air conditioner.

In order to attain maximum cooling efficiency, adjust the louvers so that they face upwards.

Washable Filters





The Unit uses two filters on the indoor side which can be slide easily. These filters can be taken out without removing the Front Grille and then cleaned by washing or brushing.

The filters should be checked and cleaned every two(2) weeks or as necessary to maintain the optimal performance of the air conditioner depending upon the region and purpose of application.

Low Noise at High Air Volume

New Blowers and Fans which are bigger and stronger than earlier ones operate at low rpm's and have higher efficiency.

High Efficiency Compressor

LG Rotary compressors have low noise, low vibration and higher efficiency and reliability.

Energy save mode

This feature employs a programmable logic which enables the unit to minimize power consumption. When the switch is activated in the "on" position, the Indoor fan turns off as soon as the compressor stops running. And in the "off" mode, the indoor fan runs continuously even if the compressor stops running.

Timer

By this feature we can set the operating time of the air conditioner from one(1) hour up to a time of 12 hours. In the "Off" mode, the Air Conditioner stops operating after the set time, while in the "On" mode, the Air Conditioner timer can be set so that the unit starts operating at the desired time.

Electric Heater

Electric heaters are used in cold regions when instant heating is required in the room.

In such cases, electric heaters are preferred over heat pump models which sometimes require long times to achieve the desired heating effect. Electric Heater are of two types – Coil Heater (265 V) and PTC Heater (208-230 V) With different heater capacity according to models.

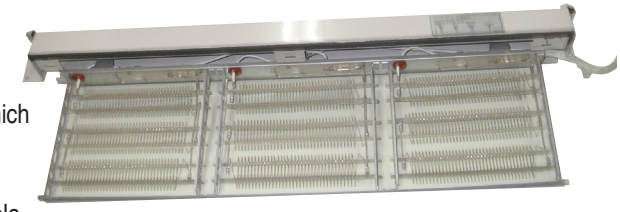


Fig : Coil Heater

Type/Capacity	2.5kW	3kW	5kW
Coil Heater (265 V)	-	9K 12K	-

Type/Capacity	2.4kW / 3.3kW / 4.7kW
PTC Heater (208-230 V)	7K 9K 12K 15K

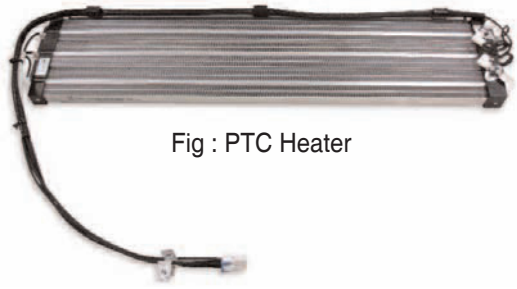


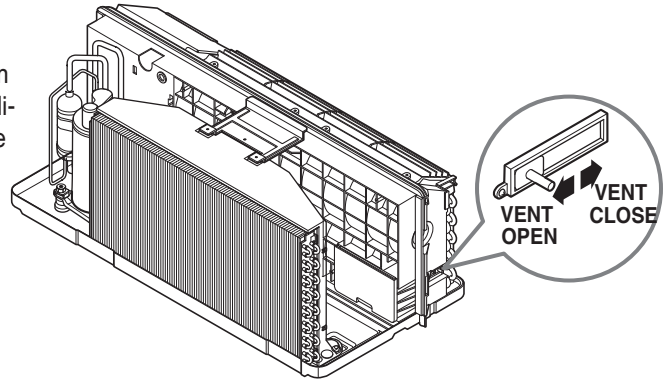
Fig : PTC Heater

Defrost Control

When the unit starts operating in the heating mode outdoor unit start freezing, to protect from freezing, Defrost Control is used. Defrost operation take place when pipe temperature reaches -1℃(30℉), △T(OD air temp – OD pipe temp)≥12 ℃ (54℉). Defrost condition operates minimum 3minutes and maximum 9minutes for complete one cycle.

Air Ventilation

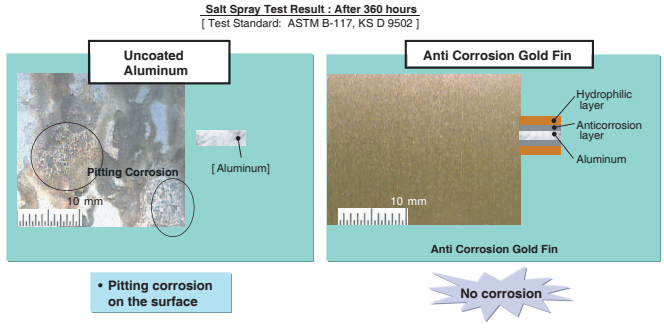
Air ventilation is carried out by means of a ventilation lever from time to time to induct outside air into the room. For the air conditioner to maintain the best cooling conditions, the lever must be in the closed position.



Energy saving Gold Fin

Heat exchangers are coated with anti-corrosive and Hydrophilic layers. It prevents the corrosion of heat exchanger. Fins remain new for a long time and the efficiency of the heat exchanger remains constant thereby saving power and maintenance cost.

Gold Fin Anti-Corrosive Treatment:



Infinite Impulse Response (IIR)

The IIR function senses the temperature several times per second and make micro adjustments accordingly.

Compressor Restart Delay

This feature extends the overall life of the compressor by preventing the short cycling of the air-conditioner. When the compressor restarts, LG PTAC is designed to give it a minimum of three minutes to have a time of equalizing the refrigerant pressures for optimizing the cycle.

Fan Only Setting

When the Fan only setting is made, only the fan on the indoor side operates while the compressor stops operating and the unit ceases to run in the Cooling or the Heating mode.

Indoor Fan Speed Setting

The Indoor fan can run at HIGH or LOW speed for either COOLING or HEATING operation.

Two Fan Motors

The air conditioning unit has dual BLDC motor, one is for indoor fan and other one for outdoor fan for providing a quiet operation and maximum efficiency.

LED Diagnostics and Self Diagnostics

LED Diagnostics feature indicates the problem by its easy to read diagnostics, when the unit does not operate properly. For example, one blink every 2 seconds indicates compressor failure.

While Self Diagnostics feature is used in micom models and it indicates the problem by displaying a set of error codes.

Indoor Room Freeze Protection

When the unit senses the room temperature to be less than 40˚ F, the unit activates the fan motor and either the electric resistance heater or the hydronic heater, to prevent the pipes or fixtures from freezing. This also overrides the front desk control of the unit mounted controls or the wall mounted controls.

Compressor Overload Protection

This feature prevents damage of the compressor by sensing the indoor coil temperature during the heating mode. If the indoor coil temperature is over 54°C(130°F), the outdoor fan is switched off and it operates again only when the temperature drops below 49°C(120°F).

Outdoor Air Temperature Switchover

For Heat pump models during the heating mode, if outdoor temp below 33°F(0.6 °C), the Comp. is OFF and Heating Mode is operated by Heater. If outdoor temp reaches 38 °F(3.3 °C) Comp. and Heater on/off controlling based on the indoor temp. However, during normal Heating mode restoration, if in the state of ON, the Heater will continue to operate until desired temp + 0.5 °F and above is reached before being turned OFF. If the Heater is at off state, it remained OFF until Comp. on condition (desired temp -1.5 °F and below) is reached.

Temperature Limits

The unit is programmed to provide both heating and cooling temperature limits by dip switches on the control panel. The limits are from 54 °F ~ 86 °F (12.2 °C ~ 30 °C). These temperature limits help to prevent overheating and overcooling thereby reducing the energy costs.

Condensate Drain Valve

The most widely used method of disposing of heat pump condensate is with a temperature-activated drain valve. This is a device mounted in the base pan of a heat pump unit with a bellows that expands on temperature rise and contracts with temperature drop. A shaft with a rubber plug on the end is connected to the bellows. When the outdoor temperature remains above a certain temperature, the bellows is expanded and the plug fits tightly into a hole in the bottom, or base pan, of the unit. When the plug is blocking the hole, as it should be during cooling operation, the condensate water is contained in the base pan. At temperatures when heating is required, the bellows contracts, the rubber plug is retracted from the hole and the heat pump condensate water is allowed to drain into the wall case. The valve is fully open at approximately 45 °F.

Quick Heater Recovery

The unit is designed to operate the electric heater so as to warm the room to the desired temperature set point as soon as the Heat Pump cycle operates. This feature has an advantage of reducing the time to reach the desired temperature for better comfort.

Reverse Cycle Defrosting – PTHP Only

This feature enables the unit to activate the reverse cycle defrost so as to prevent the formation of ice on the outdoor unit, which is exposed to cold environment. Formation of ice reduces the airflow through the coil and hence the efficiency of the air conditioning unit. The LG PTHP employs an active reverse cycle defrost function to melt the ice off the outdoor coil for ensuring room comfort conditions and savings from extended operation.

High Temperature Heat Pump Operation Protection

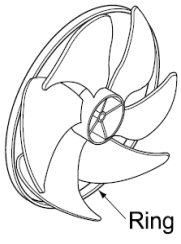
When the unit operates at high outdoor temperature conditions during the cooling cycle, this feature switches off the compressor to prevent damage.

Remote Thermostat Control

The PTAC air conditioning unit is designed and built to be operated by a wired or wireless remote mounted thermostat if desired. The unit has a built-in low voltage power source which can accommodate any of the thermostat choices – manual, auto changeover or programmable. A remote thermostat can also be added to any unit.

Slinger Technology

The PTAC air conditioner is equipped with an outdoor fan includes outer ring that takes condensate water during cooling operation from the base pan and dispense it through the condenser, increasing the unit's efficiency.



Part 2 Product data

1. YA Chassis

Models : UYC073ALEU1(LP073CDUC) UYC093ALEU1(LP093CDUC) UYC123ALEU1(LP123CDUC) UYC153ALEU1(LP153CDUC)
UYH073ALEU1(LP073HDUC) Y4NZ09ANLD1(LP093HDUC1) Y4NZ12ANLD1(LP123HDUC1) UYH153ALEU1(LP153HDUC)
UYC09EALE31(LP096CD3B) UYC12EALE31(LP126CD3B)
UYH09EALE31(LP096HD3B) UYH12EALE31(LP126HD3B)

1.1 Features

- 2 -Way Air Flow Direction
- Washable Filters
- Low Noise at High Air Volume
- High Efficiency Compressor
- Energy Saver Mode
- Timer
- Electric Heater
- Defrost Control
- Air Ventilation
- Energy saving Anti-corrosion treated Fins
- Infinite Impulse Response(IIR)
- Compressor Restart Delay
- Fan only Setting
- Indoor Fan Speed Setting
- Two Fan Motors
- LED Diagnostics and Self Diagnostics
- Indoor Room Freeze Protection
- Compressor Overload Protection
- Outdoor Air Temperature Switchover
- Temperature Limits
- Condensate Drain Valve
- Quick Heater Recovery
- Reverse Cycle Defrosting (PTHP's only)
- High Temperature Heat Pump operation Protection
- Remote Thermostat Control
- Slinger Technology

1.2 List of functions

Category	Function	PTAC Cooling only Models	PTAC Heat Pump Models
Air flow	Air discharge type	Top discharge	Top discharge
	Airflow direction control (up & down)	Manual	Manual
	Airflow direction control (left & right)	-	-
	Auto swing	-	-
	Airflow steps (fan/cool/heat)	2/2/2	2/2/2
	Airflow Direction	2 way	2 way
Air purifying	Deodorizing filter	-	-
	Plasma air filter	-	-
	Air filter (washable / anti-fungus)	O	O
Installation	Electric heater (operation)	O	O
Reliability	Hot start	-	-
Convenience	Auto restart operation	O	O
	Micom control	O	O
	Air ventilation	O	O
	Forced operation	-	-
	Sleep mode	-	-
	Timer	O	O
Individual control	Wired remote control	O	O
	Wireless remote control	O	O
Others	Energy saver mode	O	O
	Thermistor	O	O

Note :
O : applied
- : not applied

1.3 Specifications

208-230V COOLING ONLY MODELS

Buyer Models			LP073CDUC		LP093CDUC	
LG Models			UYC073ALEU1		UYC093ALEU1	
Cooling Capacity		kW	2.08	2.14	2.73	2.78
		Btu/h.	7,100	7,300	9,300	9,500
Heating Capacity (for Heat Pump models)		kW	-	-	-	-
		Btu/h.	-	-	-	-
Electric Heater capacity		kW	2.3/3.2/4.6	2.4/3.3/4.7	2.3/3.2/4.6	2.4/3.3/4.7
		Btu/h.	7,800/10,900/15,700	8,100/11,200/16,000	7,800/10,900/15,700	8,100/11,200/16,000
Power Input	Cooling/Heating	W	535	550	730	745
Running Current	Cooling/Heating	A	2.7	2.5	3.7	3.4
Electric Heater Current		A	11.2/15.5/22.3	10.5/14.5/20.6	11.2/15.5/22.3	10.5/14.5/20.6
EER		W/W	3.90	3.90	3.72	3.72
		Btu/h.W	13.3	13.3	12.7	12.7
COP		W/W	-	-	-	-
Power Supply		Ø / V / Hz	1 / 208 / 60	1 / 230 / 60	1 / 208 / 60	1 / 230 / 60
Power Factor		%	95	96	95	95
MCA		A	14.5/19.8/28.3	13.6/18.6/26.2	14.5/19.8/28.3	13.6/18.6/26.2
MOP		A	15/20/30		15/20/30	
Air Flow Rate	Indoor,Max(H/L)	m^3 / min(CFM)	7.6(270)/6.3(225)		7.6(270)/6.3(225)	
	Outdoor,Max	m^3 / min(CFM)	17(600)		17(600)	
Ventilation (Outside Air Intake)		m^3 / min(CFM)	1.42(50)		1.70(60)	
Dehumidification		pts/h	1.7		2.6	
Sound Level	Indoor,H/M/L	dB(A)±3	45/-/43		46/-/44	
	Outdoor,Max	dB(A)±3	61		61	
Refrigerant & Charge		g(oz)	R410A, 740(26.1)		R410A,600(21.2)	
Compressor	Type		Rotary(Non Tropical)		Rotary(Non Tropical)	
	Model		GA060KAA		GA080KBA	
	Motor Type		PSC		PSC	
	Oil Type		POE(RB68A)orPVE(FVC68D)		POE(RB68A)orPVE(FVC68D)	
	Oil Charge	cc	310		230	
	Capacitor	μF	15		25	
	RLA/LRA	A	2.9/16		3.7/19	
	O.L.P Name		B120-160-241E		B145-155-241E	
Fan	Type(In/Out)		Cross Flow Fan	Axial Fan	Cross Flow Fan	Axial Fan
	Motor Type(In/Out)		BLCD / BLCD		BLCD / BLCD	
	FLA(In/Out)	A	0.36/0.36		0.36/0.36	
	Motor Output(In/Out)	W	20/65		26/66	
Heat Exchanger	Evaporator	Rows * Column * FPI	2R *12C *18FPI		2R *10C *19FPI	
	Condensor	Rows * Column * FPI	3R *17C *20FPI		3R *17C *20FPI	
Power Supply Cable (Power Cord)		No.*mm^2	3 * 2.1		3 * 2.1	
Dimensions (W * H * D)		mm	1,066*406*505		1,066*406*505	
		inch	42*16*19-7/8		42*16*19-7/8	
Net Weight		kg(lbs)	43(95)		43(95)	
Gross Weight		kg(lbs)	49(108)		49(108)	
Tool Code(Chassis)			YA		YA	
Features	Operating Range Voltage (Min/Max)		187/253		187/253	
	Temperature Control		Thermistor		Thermistor	
	Energy Saver Mode		○		○	
	Prefilter(washable/anti-fungus)		○		○	
	Plasma Filter		-		-	
	Steps, Fan/Cool/Heat		2/2/2		2/2/2	
	Airflow Direction Control(up&down)		Manual		Manual	
	Airflow Direction Control(left&right)		-		-	
	Remote Control		Wall Thermostat		Wall Thermostat	
	Setting Temperature Range	Cooling	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
		Heating	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
	Auto Operation (Micom Control)		○		○	
	Panel Touch Type		Micom		Micom	
	Timer		12h, On/Off		12h, On/Off	
	Air Discharge		Top		Top	
	Air-Ventilation		○		○	
	Deice Control(Defrost)		-		-	
	Hot Start		-		-	
	Cabinet Type(Chassis Type)		Slide In-Out		Slide In-Out	
	Special Function		Electric Heater		Electric Heater	

Note : -

○ : applied

- : not applied

Buyer Models			LP123CDUC		LP153CDUC	
LG Models			UYC123ALEU1		UYC153ALEU1	
Cooling Capacity		kW	3.52	3.58	4.37	4.43
		Btu/h.	12,000	12,200	14,900	15,100
Heating Capacity (for Heat Pump models)		kW	-	-	-	-
		Btu/h.	-	-	-	-
Electric Heater capacity		kW	2.3/3.2/4.6	2.4/3.3/4.7	2.3/3.2/4.6	2.4/3.3/4.7
		Btu/h.	7,800/10,900/15,700	8,100/11,200/16,000	7,800/10,900/15,700	8,100/11,200/16,000
Power Input	Cooling/Heating	W	1,005	1,025	1,330	1,345
Running Current	Cooling/Heating	A	5.1	4.7	6.6	6.1
Electric Heater Current		A	11.2/15.5/22.3	10.5/14.5/20.6	11.2/15.5/22.3	10.5/14.5/20.6
EER		W/W	3.49	3.49	3.28	3.28
		Btu/h.W	11.9	11.9	11.2	11.2
COP		W/W	-	-	-	-
Power Supply		Ø / V / Hz	1 / 208 / 60	1 / 230 / 60	1 / 208 / 60	1 / 230 / 60
Power Factor		%	95	95	97	96
MCA		A	14.5/19.8/28.3	13.6/18.6/26.2	14.5/19.8/28.3	13.6/18.6/26.2
MOP		A	15/20/30		15/20/30	
Air Flow Rate	Indoor,Max(H/L)	m^3 / min(CFM)	11.9(420)/10.0(353)		11.9(420)/10.0(353)	
	Outdoor,Max	m^3 / min(CFM)	20(706)		20(706)	
Ventilation (Outside Air Intake)		m^3 / min(CFM)	1.98(70)		1.98(70)	
Dehumidification		pts/h	3.0		4.3	
Sound Level	Indoor,H/M/L	dB(A)±3	50/-/48		51/-/49	
	Outdoor,Max	dB(A)±3	63		64	
Refrigerant & Charge		g(oz)	R410A, 610(21.5)		R410A, 910(31.2)	
Compressor	Type		Rotary(Non Tropical)		Rotary(Non Tropical)	
	Model		PA108M1C		PA140M2C	
	Motor Type		PSC		PSC	
	Oil Type		ESTER OIL VG74		ESTER OIL VG74	
	Oil Charge	cc	350		440	
	Capacitor	μF	35		45	
	RLA/LRA	A	5.0/27		6.55/38.6	
	O.L.P Name		BF910-MA		INTERNAL	
Fan	Type(In/Out)		Cross Flow Fan	Axial Fan	Cross Flow Fan	Axial Fan
	Motor Type(In/Out)		BLCD / BLCD		BLCD / BLCD	
	FLA(In/Out)	A	0.36/0.36		0.36/0.36	
	Motor Output(In/Out)	W	41/74		41/74	
Heat Exchanger	Evaporator	Rows * Column * FPI	2R *10C *19FPI		2R *10C *19FPI	
	Condensor	Rows * Column * FPI	3R *17C *20FPI		3R *17C *20FPI	
Power Supply Cable (Power Cord)		No.*mm^2	3 * 2.1		3 * 2.1	
Dimensions (W * H * D)		mm	1,066*406*505		1,066*406*505	
		inch	42*16*19-7/8		42*16*19-7/8	
Net Weight		kg(lbs)	45(99)		52(115)	
Gross Weight		kg(lbs)	51(112)		58(128)	
Tool Code(Chassis)			YA		YA	
Features	Operating Range Voltage (Min/Max)		187/253		187/253	
	Temperature Control		Thermistor		Thermistor	
	Energy Saver Mode		○		○	
	Prefilter(washable/anti-fungus)		○		○	
	Plasma Filter		-		-	
	Steps, Fan/Cool/Heat		2/2/2		2/2/2	
	Airflow Direction Control(up&down)		Manual		Manual	
	Airflow Direction Control(left&right)		-		-	
	Remote Control		Wall Thermostat		Wall Thermostat	
	Setting Temperature Range	Cooling	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
		Heating	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
	Auto Operation (Micom Control)		○		○	
	Panel Touch Type		Micom		Micom	
	Timer		12h, On/Off		12h, On/Off	
	Air Discharge		Top		Top	
	Air-Ventilation		○		○	
	Deice Control(Defrost)		-		-	
	Hot Start		-		-	
	Cabinet Type(Chassis Type)		Slide In-Out		Slide In-Out	
	Special Function		Electric Heater		Electric Heater	

Note : -

○ : applied

- : not applied

208-230V HEAT PUMP MODELS

Buyer Models			LP073HDUC		LP093HDUC1	
LG Models			UYH073ALEU1		Y4NZ09ANLD1	
Cooling Capacity		kW	2.08	2.14	2.93	2.99
		Btu/h.	7,100	7,300	10,000	10,200
Heating Capacity (for Heat Pump models)		kW	1.82	1.88	2.52	2.58
		Btu/h.	6,200	6,400	8,600	8,800
Electric Heater capacity		kW	2.3/3.2/4.6	2.4/3.3/4.7	2.3/3.2/4.6	2.4/3.3/4.7
		Btu/h.	7,800/10,900/15,700	8,100/11,200/16,000	7,800/10,900/15,700	8,100/11,200/16,000
Power Input	Cooling/Heating	W	535/500	550/520	800/720	820/735
Running Current	Cooling/Heating	A	2.7/2.6	2.5/2.4	4.0/3.5	3.7/3.2
Electric Heater Current		A	11.2/15.5/22.3	10.5/14.5/20.6	11.2/15.5/22.3	10.5/14.5/20.6
EER		W/W	3.90	3.90	3.63	3.63
		Btu/h.W	13.3	13.3	12.4	12.4
COP		W/W	3.6	3.6	3.5	3.5
Power Supply		Ø / V / Hz	1 / 208 / 60	1 / 230 / 60	1 / 208 / 60	1 / 230 / 60
Power Factor		%	95	96	96	97
MCA		A	14.5/19.8/28.3	13.6/18.6/26.2	14.5/19.8/28.3	13.6/18.6/26.2
MOP		A	15/20/30		15/20/30	
Air Flow Rate	Indoor,Max(H/L)	m^3 / min(CFM)	7.6(270)/6.3(225)		7.6(270)/6.3(225)	
	Outdoor,Max	m^3 / min(CFM)	17(600)		17(600)	
Ventilation (Outside Air Intake)		m^3 / min(CFM)	1.42(50)		1.70(60)	
Dehumidification		pts/h	1.7		2.6	
Sound Level	Indoor,H/M/L	dB(A)±3	45/-/43		46/-/44	
	Outdoor,Max	dB(A)±3	61		61	
Refrigerant & Charge		g(oz)	R410A, 740(26.1)		R410A, 850(30.0)	
Compressor	Type		Rotary(Non Tropical)		Rotary(Non Tropical)	
	Model		GA060KAA		GKS094KBC	
	Motor Type		PSC		PSC	
	Oil Type		POE(RB68A)orPVE(FVC68D)		POE(RB68A)orPVE(FVC68D)	
	Oil Charge	cc	310		280	
	Capacitor	μF	15		35	
	RLA/LRA	A	2.9/16		4.3/26	
	O.L.P Name		B120-160-241E		B195-140-241E	
Fan	Type(In/Out)		Cross Flow Fan	Axial Fan	Cross Flow Fan	Axial Fan
	Motor Type(In/Out)		BLCD / BLCD		BLCD / BLCD	
	FLA(In/Out)	A	0.36/0.36		0.36/0.36	
	Motor Output(In/Out)	W	20/65		26/66	
Heat Exchanger	Evaporator	Rows * Column * FPI	2R *12C *18FPI		2R *10C *19FPI	
	Condensor	Rows * Column * FPI	3R *17C *20FPI		3R *17C *20FPI	
Power Supply Cable (Power Cord)		No.*mm^2	3 * 2.1		3 * 2.1	
Dimensions (W * H * D)		mm	1,066*406*505		1,066*406*505	
		inch	42*16*19-7/8		42*16*19-7/8	
Net Weight		kg(lbs)	43(95)		47(104)	
Gross Weight		kg(lbs)	49(108)		53(117)	
Tool Code(Chassis)			YA		YA	
Features	Operating Range Voltage (Min/Max)		187/253		187/253	
	Temperature Control		Thermistor		Thermistor	
	Energy Saver Mode		○		○	
	Prefilter(washable/anti-fungus)		○		○	
	Plasma Filter		-		-	
	Steps, Fan/Cool/Heat		2/2/2		2/2/2	
	Airflow Direction Control(up&down)		Manual		Manual	
	Airflow Direction Control(left&right)		-		-	
	Remote Control		Wall Thermostat		Wall Thermostat	
	Setting Temperature Range	Cooling	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
		Heating	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
	Auto Operation (Micom Control)		○		○	
	Panel Touch Type		Micom		Micom	
	Timer		12h, On/Off		12h, On/Off	
	Air Discharge		Top		Top	
	Air-Ventilation		○		○	
	Deice Control(Defrost)		-		-	
	Hot Start		-		-	
	Cabinet Type(Chassis Type)		Slide In-Out		Slide In-Out	
	Special Function		Electric Heater		Electric Heater	

Note : -

○ : applied

- : not applied

Buyer Models			LP123HDUC1		LP153HDUC	
LG Models			Y4NZ12ANLD1		UYH153ALEU1	
Cooling Capacity		kW	3.49	3.55	4.37	4.43
		Btu/h.	11,900	12,100	14,900	15,100
Heating Capacity (for Heat Pump models)		kW	3.02	3.08	3.87	3.93
		Btu/h.	10,300	10,500	13,200	13,400
Electric Heater capacity		kW	2.3/3.2/4.6	2.4/3.3/4.7	2.3/3.2/4.6	2.4/3.3/4.7
		Btu/h.	7,800/10,900/15,700	8,100/11,200/16,000	7,800/10,900/15,700	8,100/11,200/16,000
Power Input	Cooling/Heating	W	1,000/865	1,020/880	1,330/1250	1,345/1265
Running Current	Cooling/Heating	A	5.1/4.4	4.7/4.1	6.6/6.2	6.1/5.7
Electric Heater Current		A	11.2/15.5/22.3	10.5/14.5/20.6	11.2/15.5/22.3	10.5/14.5/20.6
EER		W/W	3.49	3.49	3.28	3.28
		Btu/h.W	11.9	11.9	11.2	11.2
COP		W/W	3.5	3.5	3.1	3.1
Power Supply		Ø / V / Hz	1 / 208 / 60	1 / 230 / 60	1 / 208 / 60	1 / 230 / 60
Power Factor		%	94	93	97	96
MCA		A	14.5/19.8/28.3	13.6/18.6/26.2	14.5/19.8/28.3	13.6/18.6/26.2
MOP		A	15/20/30		15/20/30	
Air Flow Rate	Indoor,Max(H/L)	m^3 / min(CFM)	11.9(420)/10.0(353)		11.9(420)/10.0(353)	
	Outdoor,Max	m^3 / min(CFM)	20(706)		20(706)	
Ventilation (Outside Air Intake)		m^3 / min(CFM)	1.98(70)		1.98(70)	
Dehumidification		pts/h	3.0		4.3	
Sound Level	Indoor,H/M/L	dB(A)±3	50/-/48		51/-/49	
	Outdoor,Max	dB(A)±3	63		64	
Refrigerant & Charge		g(oz)	R410A, 950(33.5)		R410A, 910(32.1)	
Compressor	Type		Rotary(Non Tropical)		Rotary(Non Tropical)	
	Model		ASM106N1VDZ		PA140M2C	
	Motor Type		PSC		PSC	
	Oil Type		ESTER OIL VG74		ESTER OIL VG74	
	Oil Charge	cc	300		440	
	Capacitor	μF	35		45	
	RLA/LRA	A	4.1/27		6.55/38.6	
	O.L.P Name		INTERNAL		INTERNAL	
Fan	Type(In/Out)		Cross Flow Fan	Axial Fan	Cross Flow Fan	Axial Fan
	Motor Type(In/Out)		BLCD / BLCD		BLCD / BLCD	
	FLA(In/Out)	A	0.36/0.36		0.36/0.36	
	Motor Output(In/Out)	W	41/74		41/74	
Heat Exchanger	Evaporator	Rows * Column * FPI	2R *10C *19FPI		2R *10C *19FPI	
	Condensor	Rows * Column * FPI	3R * 17C * 20FPI		3R *17C *20FPI	
Power Supply Cable (Power Cord)		No.*mm^2	3 * 2.1		3 * 2.1	
Dimensions (W * H * D)		mm	1,066*406*505		1,066*406*505	
		inch	42*16*19-7/8		42*16*19-7/8	
Net Weight		kg(lbs)	47(104)		52(115)	
Gross Weight		kg(lbs)	53(117)		58(128)	
Tool Code(Chassis)			YA		YA	
Features	Operating Range Voltage (Min/Max)		187/253		187/253	
	Temperature Control		Thermistor		Thermistor	
	Energy Saver Mode		○		○	
	Prefilter(washable/anti-fungus)		○		○	
	Plasma Filter		-		-	
	Steps, Fan/Cool/Heat		2/2/2		2/2/2	
	Airflow Direction Control(up&down)		Manual		Manual	
	Airflow Direction Control(left&right)		-		-	
	Remote Control		Wall Thermostat		Wall Thermostat	
	Setting Temperature Range	Cooling	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
		Heating	54˚F ~ 86˚F(12.2℃ ~ 30℃)		54˚F ~ 86˚F(12.2℃ ~ 30℃)	
	Auto Operation (Micom Control)		○		○	
	Panel Touch Type		Micom		Micom	
	Timer		12h, On/Off		12h, On/Off	
	Air Discharge		Top		Top	
	Air-Ventilation		○		○	
	Deice Control(Defrost)		-		-	
	Hot Start		-		-	
	Cabinet Type(Chassis Type)		Slide In-Out		Slide In-Out	
	Special Function		Electric Heater		Electric Heater	

Note : -

○ : applied

- : not applied

265V COOLING ONLY MODELS

Buyer Models			LP096CD3B	LP126CD3B
LG Models			UYC09EALE31	UYC12EALE31
Cooling Capacity		kW	2.84	3.58
		Btu/h.	9,700	12,200
Heating Capacity (for Heat Pump models)		kW	-	-
		Btu/h.	-	-
Electric Heater capacity		kW	3.7	3.7
		Btu/h.	12,600	12,600
Power Input	Cooling/Heating	W	755	1,025
Running Current	Cooling/Heating	A	3.0	4.0
Electric Heater Current		A	14.0	14.0
EER		W/W	3.75	3.49
		Btu/h.W	12.8	11.9
COP		W/W	-	-
Power Supply		Ø / V / Hz	1 / 265 / 60	1 / 265 / 60
Power Factor		%	95	97
MCA		A	17.9	17.9
MOP		A	20.0	20.0
Air Flow Rate	Indoor,Max(H/L)	m^3 / min(CFM)	7.6(270)/6.3(225)	11.9(420)/10.0(353)
	Outdoor,Max	m^3 / min(CFM)	17(600)	20(706)
Ventilation (Outside Air Intake)		m^3 / min(CFM)	1.70(60)	1.98(70)
Dehumidification		pts/h	2.6	3.0
Sound Level	Indoor,H/M/L	dB(A)±3	46/-/44	50/-/48
	Outdoor,Max	dB(A)±3	61	63
Refrigerant & Charge		g(oz)	R410A, 895(31.6)	R410A, 910(32.1)
Compressor	Type		Rotary(Non Tropical)	Rotary(Non Tropical)
	Model		GKU086QAA	GKU113QAA
	Motor Type		PSC	PSC
	Oil Type		POE(RB68A) or PVE(FVC68D)	POE(RB68A) or PVE(FVC68D)
	Oil Charge	cc	330	330
	Capacitor	μF	20	25
	RLA/LRA	A	3.3/20	4.4/22
	O.L.P Name		LPMD2W69-L002	LMSH2Z69-L002
Fan	Type(In/Out)		Cross Flow Fan / Axial Fan	Cross Flow Fan / Axial Fan
	Motor Type(In/Out)		BLCD / BLCD	BLCD / BLCD
	FLA(In/Out)	A	0.36/0.36	0.36/0.36
	Motor Output(In/Out)	W	26/66	41/74
Heat Exchanger	Evaporator	Rows * Column * FPI	2R *10C *19FPI	2R *10C *19FPI
	Condensor	Rows * Column * FPI	3R *17C *20FPI	3R *17C *20FPI
Power Supply Cable (Power Cord)		No.*mm^2	3 * 3.3	3 * 3.3
Dimensions (W * H * D)		mm	1,066*406*505	1,066*406*505
		inch	42*16*19-7/8	42*16*19-7/8
Net Weight		kg(lbs)	48(106)	48(106)
Gross Weight		kg(lbs)	54(119)	54(119)
Tool Code(Chassis)			YA	YA
Features	Operating Range Voltage (Min/Max)		239/292	239/292
	Temperature Control		Thermistor	Thermistor
	Energy Saver Mode		○	○
	Prefilter(washable/anti-fungus)		○	○
	Plasma Filter		-	-
	Steps, Fan/Cool/Heat		2/2/2	2/2/2
	Airflow Direction Control(up&down)		Manual	Manual
	Airflow Direction Control(left&right)		-	-
	Remote Control		Wall Thermostat	Wall Thermostat
	Setting Temperature Range	Cooling	54˚F ~ 86˚F(12.2℃ ~ 30℃)	54˚F ~ 86˚F(12.2℃ ~ 30℃)
		Heating	54˚F ~ 86˚F(12.2℃ ~ 30℃)	54˚F ~ 86˚F(12.2℃ ~ 30℃)
	Auto Operation (Micom Control)		○	○
	Panel Touch Type		Micom	Micom
	Timer		12h, On/Off	12h, On/Off
	Air Discharge		Top	Top
	Air-Ventilation		○	○
	Deice Control(Defrost)		-	-
	Hot Start		-	-
	Cabinet Type(Chassis Type)		Slide In-Out	Slide In-Out
	Special Function		Coil Heater	Coil Heater

Note : -

○ : applied

- : not applied

265V HEAT PUMP MODELS

Buyer Models			LP096HD3B	LP126HD3B
LG Models			UYH09EALE31	UYH12EALE31
Cooling Capacity		kW	2.84	3.58
		Btu/h.	9,700	12,200
Heating Capacity (for Heat Pump models)		kW	2.49	3.22
		Btu/h.	8,500	11,000
Electric Heater capacity		kW	3.7	3.7
		Btu/h.	12,600	12,600
Power Input	Cooling/Heating	W	755/690	1,025/895
Running Current	Cooling/Heating	A	3.0/2.7	4.0/3.5
Electric Heater Current		A	14.0	14.0
EER		W/W	3.75	3.49
		Btu/h.W	12.8	11.9
COP		W/W	3.6	3.6
Power Supply		Ø / V / Hz	1 / 265 / 60	1 / 265 / 60
Power Factor		%	95	97
MCA		A	17.9	17.9
MOP		A	20.0	20.0
Air Flow Rate	Indoor,Max(H/L)	m^3 / min(CFM)	7.6(270)/6.3(225)	11.9(420)/10.0(353)
	Outdoor,Max	m^3 / min(CFM)	17(600)	20(706)
Ventilation (Outside Air Intake)		m^3 / min(CFM)	1.70(60)	1.98(70)
Dehumidification		pts/h	2.6	3.0
Sound Level	Indoor,H/M/L	dB(A)±3	46/-/44	50/-/48
	Outdoor,Max	dB(A)±3	61	63
Refrigerant & Charge		g(oz)	R410A, 895(31.6)	R410A, 910(32.1)
Compressor	Type		Rotary(Non Tropical)	Rotary(Non Tropical)
	Model		GKU086QAA	GKU113QAA
	Motor Type		PSC	PSC
	Oil Type		POE(RB68A) or PVE(FVC68D)	POE(RB68A) or PVE(FVC68D)
	Oil Charge	cc	330	330
	Capacitor	μF	20	25
	RLA/LRA	A	3.3/20	4.4/22
	O.L.P Name		LPMD2W69-L002	LMSH2Z69-L002
Fan	Type(In/Out)		Cross Flow Fan / Axial Fan	Cross Flow Fan / Axial Fan
	Motor Type(In/Out)		BLCD / BLCD	BLCD / BLCD
	FLA(In/Out)	A	0.36/0.36	0.36/0.36
	Motor Output(In/Out)	W	26/66	41/74
Heat Exchanger	Evaporator	Rows * Column * FPI	2R *10C *19FPI	2R *10C *19FPI
	Condensor	Rows * Column * FPI	3R *17C *20FPI	3R *17C *20FPI
Power Supply Cable (Power Cord)		No.*mm^2	3 * 3.3	3 * 3.3
Dimensions (W * H * D)		mm	1,066*406*505	1,066*406*505
		inch	42*16*19-7/8	42*16*19-7/8
Net Weight		kg(lbs)	48(106)	48(106)
Gross Weight		kg(lbs)	54(119)	54(119)
Tool Code(Chassis)			YA	YA
Features	Operating Range Voltage (Min/Max)		239/292	239/292
	Temperature Control		Thermistor	Thermistor
	Energy Saver Mode		○	○
	Prefilter(washable/anti-fungus)		○	○
	Plasma Filter		-	-
	Steps, Fan/Cool/Heat		2/2/2	2/2/2
	Airflow Direction Control(up&down)		Manual	Manual
	Airflow Direction Control(left&right)		-	-
	Remote Control		Wall Thermostat	Wall Thermostat
	Setting Temperature Range	Cooling	54˚F ~ 86˚F(12.2℃ ~ 30℃)	54˚F ~ 86˚F(12.2℃ ~ 30℃)
		Heating	54˚F ~ 86˚F(12.2℃ ~ 30℃)	54˚F ~ 86˚F(12.2℃ ~ 30℃)
	Auto Operation (Micom Control)		○	○
	Panel Touch Type		Micom	Micom
	Timer		12h, On/Off	12h, On/Off
	Air Discharge		Top	Top
	Air-Ventilation		○	○
	Deice Control(Defrost)		-	-
	Hot Start		-	-
	Cabinet Type(Chassis Type)		Slide In-Out	Slide In-Out
	Special Function		Coil Heater	Coil Heater

Note : -

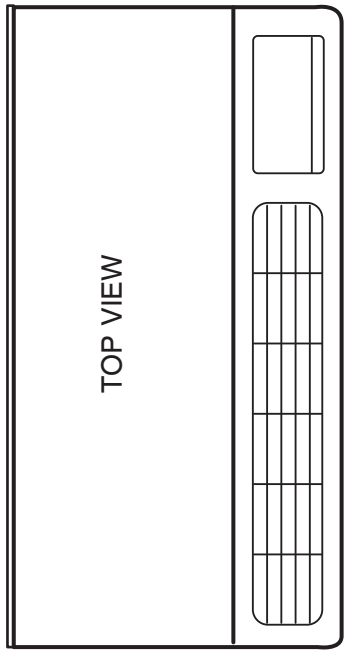
○ : applied

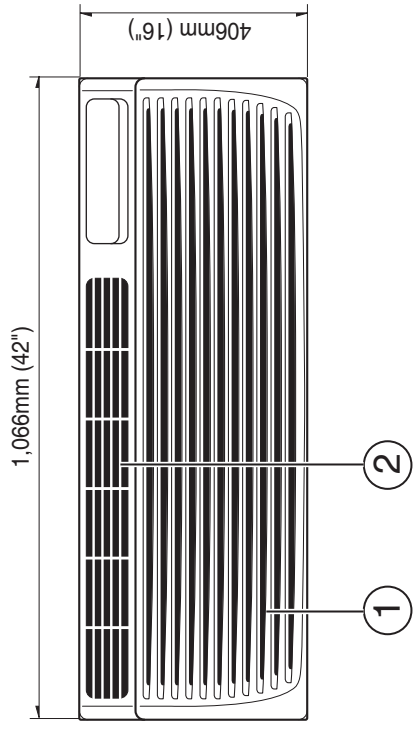
- : not applied

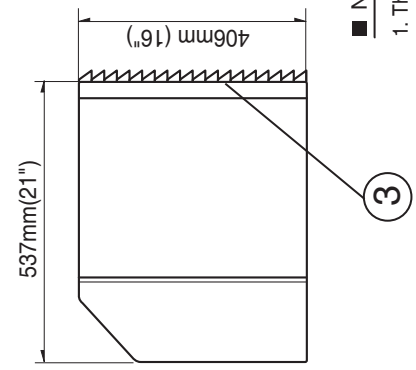
1.4 Dimensions

PTAC

Item No.	Part name	Remark
1	Inlet Grille	
2	Vertical Air Deflector	
3	Architectural Grille	
4		
5		







■ Note

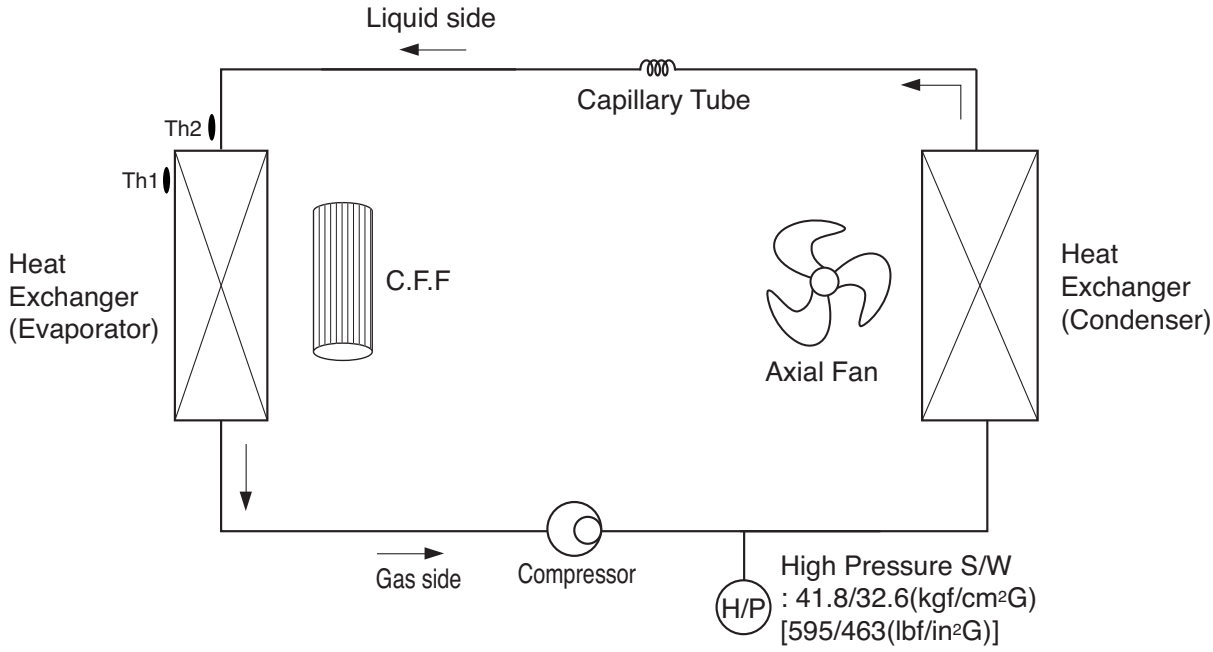
1. The unit should not be installed in a closed area.
2. In an area or space having no proper circulation, an air guide should be installed on the outdoor side.

CHASSIS CODE : YA

LG Electronics
76, Seongsang-dong, Changwon City, Gyeongnam, 641-713, Korea
TEL : 82 – 55 – 269 - 3506
www.lge.com/airconditioner

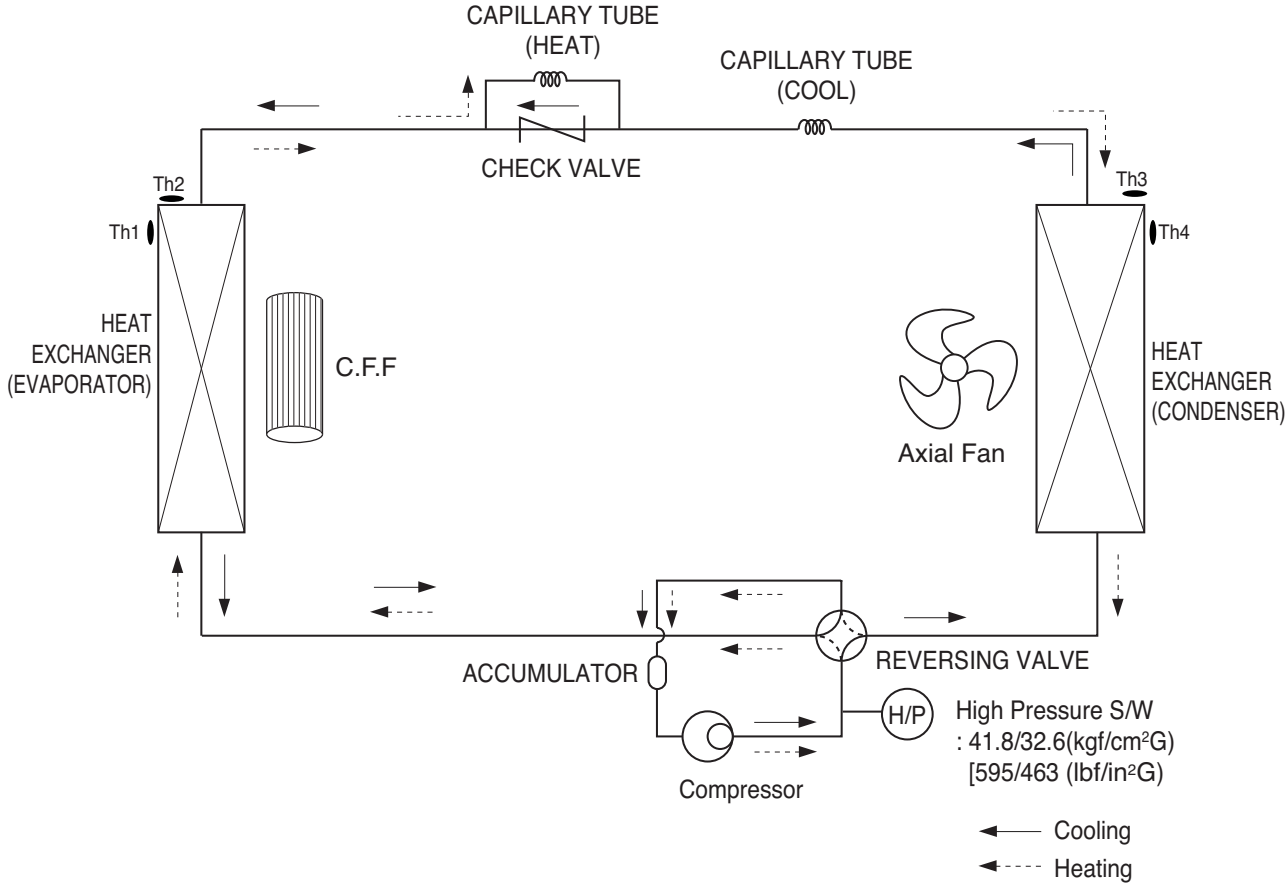
1.5 Piping diagrams

Models : UYC073ALEU1(LP073CDUC) UYC09EALE31(LP096CD3B)
UYC093ALEU1(LP093CDUC) UYC12EALE31(LP126CD3B)
UYC123ALEU1(LP123CDUC)
UYC153ALEU1(LP153CDUC)



LOC.	Description	PCB Connector
Th1	Thermistor for indoor Air temperature	CN-IDAT2
Th2	Thermistor for evaporator temperature	CN-IDPT

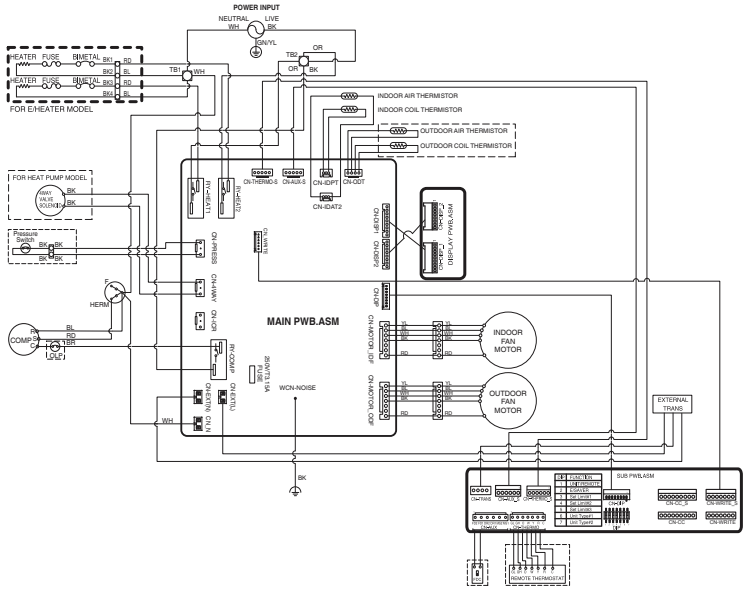
Models : UYH073ALEU1(LP073HDUC) UYH09EALE31(LP096HD3B)
Y4NZ09ANLD1(LP093HDUC1) UYH12EALE31(LP126HD3B)
Y4NZ12ANLD1(LP123HDUC1)
UYH153ALEU1(LP153HDUC)



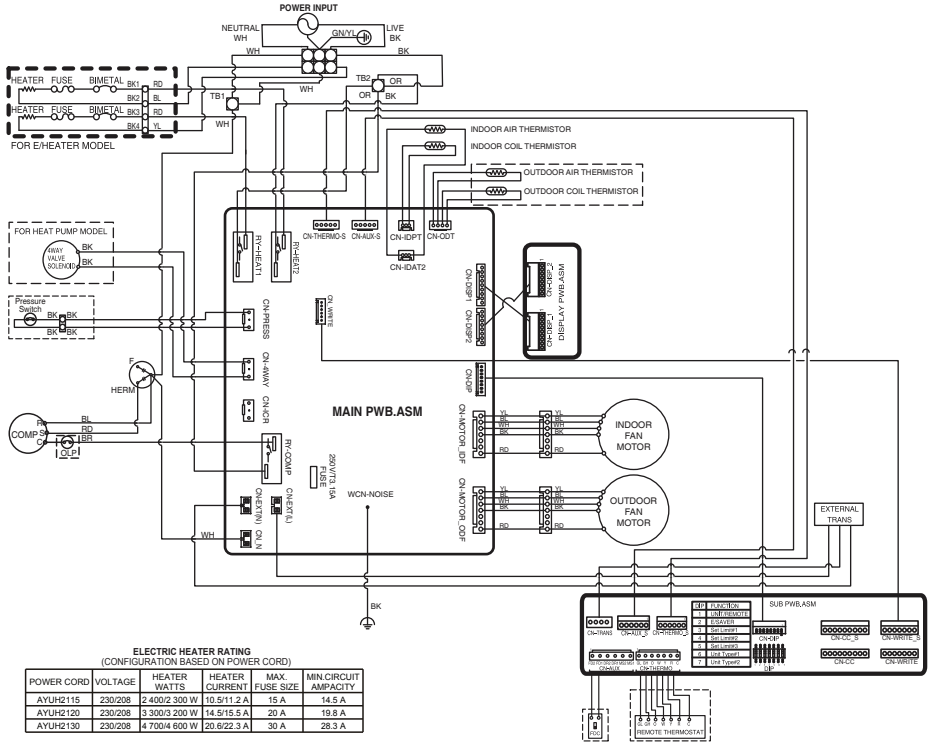
LOC.	Description	PCB Connector
Th1	Thermistor for indoor air temperature	CN-IDAT2
Th2	Thermistor for evaporator temperature	CN-IDPT
Th3	Thermistor for outdoor air temperature	CN-ODT
Th4	Thermistor for condenser temperature	

1.6 Wiring diagrams

Models : UYC09EALE31(LP096CD3B)
UYH09EALE31(LP096HD3B)
UYC12EALE31(LP126CD3B)
UYH12EALE31(LP126HD3B)

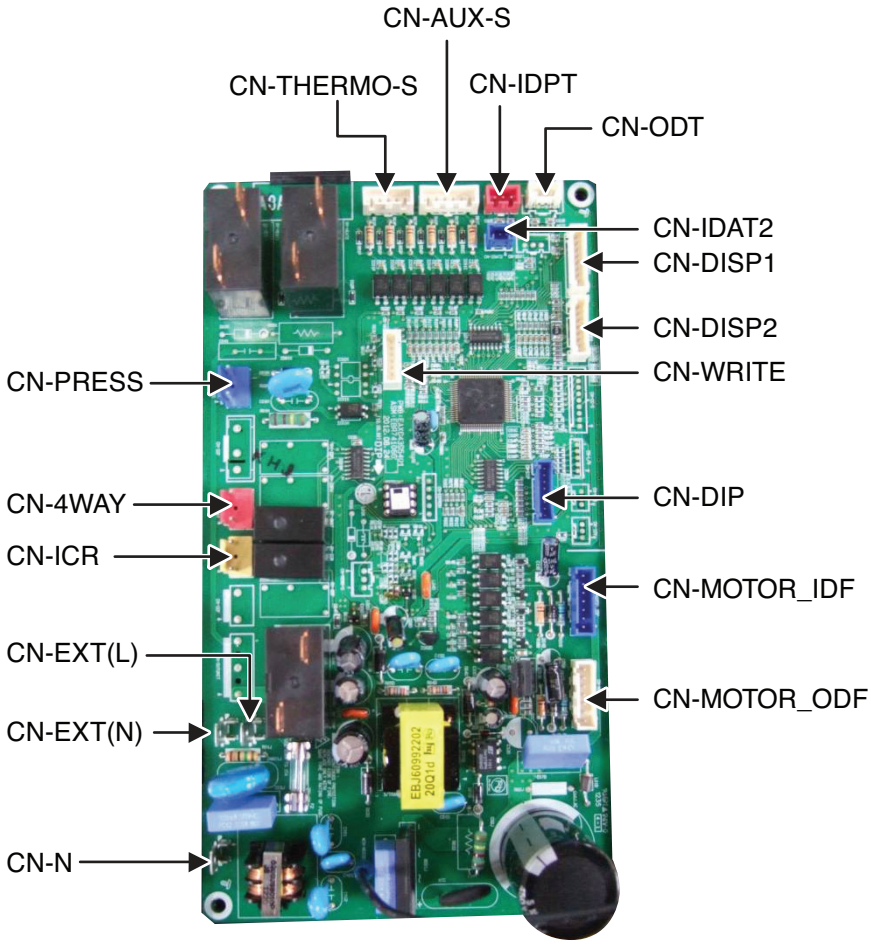


Models : UYC073ALEU1(LP073CDUC) **UYC123ALEU1(LP123CDUC)**
UYH073ALEU1(LP073HDUC) **Y4NZ12ANLD1(LP123HDUC1)**
UYC093ALEU1(LP093CDUC) **UYC153ALEU1(LP153CDUC)**
Y4NZ09ANLD1(LP093HDUC1) **UYH153ALEU1(LP153HDUC)**



ELECTRIC HEATER RATING
(CONFIGURATION BASED ON POWER CORD)

POWER CORD	VOLTAGE	HEATER WATTS	HEATER CURRENT	MAX. FUSE SIZE	MIN.CIRCUIT AMPACITY
AYUH2115	230/208	2 400/2 300 W	10.5/11.2 A	15 A	14.5 A
AYUH2120	230/208	3 300/3 200 W	14.5/15.5 A	20 A	19.8 A
AYUH2130	230/208	4 700/4 600 W	20.6/22.3 A	30 A	28.3 A


CN-AUX-S
CN-THERMO-S
CN-IDPT
CN-ODT
CN-IDAT2
CN-DISP1
CN-DISP2
CN-WRITE
CN-PRESS
CN-DIP
CN-4WAY
CN-ICR
CN-MOTOR_IDF
CN-EXT(L)
CN-MOTOR_ODF
CN-EXT(N)
CN-N

1.7 Capacity tables

Cooling Capacity

UYC073ALEU1(LP073CDUC)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	5.92	5.80	0.36	5.80	5.88	0.43	5.52	6.00	0.50
60.8	71.6	6.91	5.65	0.37	6.76	5.71	0.44	6.44	5.82	0.51
64.4	77.0	7.71	5.51	0.37	7.55	5.56	0.44	7.19	5.66	0.52
66.2	80.6	8.07	5.44	0.38	7.90	5.49	0.45	7.52	5.58	0.52
71.6	86.0	8.85	5.26	0.38	8.67	5.30	0.46	8.26	5.38	0.53
75.2	89.6	9.19	5.15	0.39	8.99	5.19	0.46	8.57	5.25	0.54

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	5.36	6.06	0.53	5.16	6.15	0.56	4.99	6.21	0.58
60.8	71.6	6.25	5.87	0.54	6.02	5.95	0.57	5.82	6.00	0.59
64.4	77.0	6.98	5.70	0.54	6.72	5.77	0.58	6.50	5.82	0.60
66.2	80.6	7.30	5.62	0.55	7.03	5.69	0.59	6.80	5.73	0.61
71.6	86.0	8.01	5.41	0.56	7.71	5.46	0.60	7.46	5.49	0.62
75.2	89.6	8.31	5.28	0.57	8.00	5.33	0.60	7.74	5.36	0.62

UYC093ALEU1(LP093CDUC)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	7.71	7.43	0.49	7.54	7.52	0.58	7.19	7.67	0.67
60.8	71.6	8.99	7.23	0.50	8.80	7.31	0.59	8.39	7.45	0.69
64.4	77.0	10.03	7.04	0.50	9.82	7.12	0.60	9.36	7.24	0.70
66.2	80.6	10.50	6.96	0.51	10.28	7.03	0.61	9.79	7.14	0.71
71.6	86.0	11.52	6.72	0.52	11.28	6.78	0.61	10.75	6.88	0.72
75.2	89.6	11.96	6.59	0.53	11.70	6.64	0.62	11.15	6.72	0.73

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	6.97	7.75	0.71	6.71	7.87	0.76	6.49	7.94	0.78
60.8	71.6	8.14	7.51	0.72	7.83	7.62	0.77	7.58	7.68	0.79
64.4	77.0	9.08	7.29	0.73	8.74	7.39	0.78	8.45	7.44	0.80
66.2	80.6	9.50	7.19	0.75	9.15	7.28	0.79	8.85	7.33	0.82
71.6	86.0	10.43	6.92	0.75	10.04	6.99	0.80	9.71	7.03	0.83
75.2	89.6	10.82	6.76	0.77	10.42	6.82	0.81	10.08	6.85	0.84

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
SHC : Sensible Heating Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate

UYC123ALEU1(LP123CDUC)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	9.89	9.38	0.67	9.69	9.49	0.80	9.23	9.69	0.93
60.8	71.6	11.55	9.13	0.68	11.30	9.23	0.81	10.77	9.40	0.94
64.4	77.0	12.88	8.89	0.69	12.61	8.99	0.82	12.02	9.14	0.96
66.2	80.6	13.48	8.79	0.70	13.20	8.87	0.83	12.58	9.02	0.97
71.6	86.0	14.80	8.49	0.71	14.48	8.56	0.85	13.80	8.68	0.99
75.2	89.6	15.36	8.32	0.72	15.03	8.38	0.86	14.32	8.49	1.00

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	8.95	9.78	0.98	8.62	9.94	1.04	8.34	10.03	1.07
60.8	71.6	10.45	9.48	0.99	10.06	9.62	1.06	9.73	9.70	1.09
64.4	77.0	11.66	9.21	1.01	11.22	9.33	1.07	10.86	9.39	1.11
66.2	80.6	12.20	9.08	1.03	11.75	9.19	1.09	11.36	9.25	1.13
71.6	86.0	13.39	8.74	1.04	12.89	8.83	1.10	12.47	8.87	1.14
75.2	89.6	13.89	8.54	1.05	13.38	8.61	1.12	12.94	8.65	1.16

UYC153ALEU1(LP153CDUC)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	12.25	10.79	0.88	11.99	10.92	1.04	11.42	11.15	1.22
60.8	71.6	14.29	10.50	0.89	13.99	10.62	1.06	13.33	10.82	1.24
64.4	77.0	15.94	10.23	0.91	15.61	10.34	1.08	14.87	10.52	1.26
66.2	80.6	16.69	10.11	0.92	16.33	10.21	1.09	15.56	10.38	1.28
71.6	86.0	18.31	9.77	0.94	17.93	9.85	1.11	17.08	9.99	1.29
75.2	89.6	19.01	9.57	0.95	18.60	9.64	1.13	17.73	9.77	1.31

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	11.08	11.26	1.28	10.67	11.43	1.36	10.32	11.54	1.41
60.8	71.6	12.93	10.91	1.30	12.45	11.07	1.39	12.04	11.16	1.43
64.4	77.0	14.43	10.60	1.32	13.89	10.73	1.41	13.44	10.81	1.45
66.2	80.6	15.10	10.45	1.35	14.54	10.58	1.43	14.06	10.65	1.48
71.6	86.0	16.57	10.05	1.36	15.96	10.16	1.45	15.43	10.21	1.50
75.2	89.6	17.20	9.82	1.38	16.56	9.91	1.47	16.02	9.96	1.52

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
SHC : Sensible Heating Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate

UYH073ALEU1(LP073HDUC)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	5.92	5.91	0.36	5.80	5.98	0.43	5.52	6.11	0.50
60.8	71.6	6.91	5.75	0.37	6.76	5.82	0.44	6.44	5.92	0.51
64.4	77.0	7.71	5.60	0.37	7.55	5.66	0.44	7.19	5.76	0.52
66.2	80.6	8.07	5.54	0.38	7.90	5.59	0.45	7.52	5.68	0.52
71.6	86.0	8.85	5.35	0.38	8.67	5.40	0.46	8.26	5.47	0.53
75.2	89.6	9.19	5.24	0.39	8.99	5.28	0.46	8.57	5.35	0.54

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	5.36	6.16	0.53	5.16	6.26	0.56	4.99	6.32	0.58
60.8	71.6	6.25	5.97	0.54	6.02	6.06	0.57	5.82	6.11	0.59
64.4	77.0	6.98	5.80	0.54	6.72	5.88	0.58	6.50	5.92	0.60
66.2	80.6	7.30	5.72	0.55	7.03	5.79	0.59	6.80	5.83	0.61
71.6	86.0	8.01	5.51	0.56	7.71	5.56	0.60	7.46	5.59	0.62
75.2	89.6	8.31	5.38	0.57	8.00	5.43	0.60	7.74	5.45	0.62

Y4NZ09ANLD1(LP093HDUC1)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	8.27	7.48	0.54	8.10	7.57	0.64	7.72	7.73	0.74
60.8	71.6	9.65	7.28	0.55	9.45	7.36	0.65	9.00	7.50	0.75
64.4	77.0	10.77	7.09	0.55	10.54	7.17	0.66	10.05	7.29	0.77
66.2	80.6	11.27	7.01	0.56	11.03	7.08	0.67	10.51	7.19	0.78
71.6	86.0	12.37	6.77	0.57	12.11	6.83	0.68	11.54	6.92	0.79
75.2	89.6	12.84	6.63	0.58	12.57	6.68	0.69	11.97	6.77	0.80

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	7.49	7.80	0.78	7.21	7.92	0.83	7.04	8.00	0.86
60.8	71.6	8.73	7.56	0.79	8.41	7.67	0.84	8.22	7.73	0.87
64.4	77.0	9.75	7.34	0.81	9.38	7.44	0.86	9.17	7.49	0.89
66.2	80.6	10.20	7.24	0.82	9.82	7.33	0.87	9.59	7.38	0.90
71.6	86.0	11.19	6.97	0.83	10.78	7.04	0.88	10.53	7.08	0.91
75.2	89.6	11.62	6.81	0.84	11.18	6.87	0.90	10.93	6.90	0.93

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
SHC : Sensible Heating Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate

Y4NZ12ANLD1(LP123HDUC1)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	9.81	9.62	0.67	9.61	9.74	0.79	9.15	9.94	0.92
60.8	71.6	11.45	9.36	0.68	11.21	9.47	0.80	10.68	9.65	0.94
64.4	77.0	12.78	9.13	0.69	12.51	9.22	0.82	11.92	9.38	0.95
66.2	80.6	13.37	9.01	0.70	13.09	9.10	0.83	12.47	9.25	0.97
71.6	86.0	14.68	8.71	0.71	14.36	8.79	0.84	13.69	8.91	0.98
75.2	89.6	15.23	8.53	0.72	14.91	8.60	0.85	14.21	8.71	0.99

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	8.88	10.04	0.97	8.55	10.19	1.03	8.35	10.29	1.07
60.8	71.6	10.36	9.73	0.99	9.98	9.87	1.05	9.75	9.95	1.09
64.4	77.0	11.56	9.45	1.00	11.13	9.57	1.07	10.87	9.64	1.10
66.2	80.6	12.10	9.32	1.02	11.65	9.43	1.08	11.38	9.49	1.12
71.6	86.0	13.28	8.96	1.03	12.79	9.06	1.10	12.49	9.11	1.14
75.2	89.6	13.78	8.76	1.05	13.27	8.84	1.11	12.96	8.88	1.15

UYH153ALEU1(LP153HDUC)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	12.25	10.79	0.88	11.99	10.92	1.04	11.42	11.15	1.22
60.8	71.6	14.29	10.50	0.89	13.99	10.62	1.06	13.33	10.82	1.24
64.4	77.0	15.94	10.23	0.91	15.61	10.34	1.08	14.87	10.52	1.26
66.2	80.6	16.69	10.11	0.92	16.33	10.21	1.09	15.56	10.38	1.28
71.6	86.0	18.31	9.77	0.94	17.93	9.85	1.11	17.08	9.99	1.29
75.2	89.6	19.01	9.57	0.95	18.60	9.64	1.13	17.73	9.77	1.31

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	11.08	11.26	1.28	10.67	11.43	1.36	10.32	11.54	1.41
60.8	71.6	12.93	10.91	1.30	12.45	11.07	1.39	12.04	11.16	1.43
64.4	77.0	14.43	10.60	1.32	13.89	10.73	1.41	13.44	10.81	1.45
66.2	80.6	15.10	10.45	1.35	14.54	10.58	1.43	14.06	10.65	1.48
71.6	86.0	16.57	10.05	1.36	15.96	10.16	1.45	15.43	10.21	1.50
75.2	89.6	17.20	9.82	1.38	16.56	9.91	1.47	16.02	9.96	1.52

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
SHC : Sensible Heating Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate

UYC09EALE31(LP096CD3B)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	7.87	7.52	0.49	7.70	7.61	0.59	7.34	7.77	0.68
60.8	71.6	9.18	7.32	0.50	8.99	7.40	0.60	8.56	7.54	0.69
64.4	77.0	10.24	7.13	0.51	10.03	7.21	0.60	9.55	7.33	0.70
66.2	80.6	10.72	7.05	0.52	10.49	7.12	0.61	10.00	7.23	0.72
71.6	86.0	11.76	6.81	0.53	11.52	6.87	0.62	10.97	6.96	0.73
75.2	89.6	12.21	6.67	0.53	11.95	6.72	0.63	11.39	6.81	0.74

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	7.12	7.84	0.72	6.85	7.97	0.77	6.63	8.04	0.79
60.8	71.6	8.31	7.60	0.73	8.00	7.71	0.78	7.74	7.78	0.80
64.4	77.0	9.27	7.39	0.74	8.92	7.48	0.79	8.63	7.53	0.82
66.2	80.6	9.70	7.28	0.76	9.34	7.37	0.80	9.03	7.42	0.83
71.6	86.0	10.65	7.01	0.76	10.25	7.08	0.81	9.91	7.12	0.84
75.2	89.6	11.05	6.85	0.78	10.64	6.91	0.83	10.29	6.94	0.85

UYC12EALE31(LP126CD3B)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	9.89	9.87	0.67	9.69	9.99	0.80	9.23	10.20	0.93
60.8	71.6	11.55	9.61	0.68	11.30	9.71	0.81	10.77	9.90	0.94
64.4	77.0	12.88	9.36	0.69	12.61	9.46	0.82	12.02	9.62	0.96
66.2	80.6	13.48	9.25	0.70	13.20	9.34	0.83	12.58	9.49	0.97
71.6	86.0	14.80	8.94	0.71	14.48	9.01	0.85	13.80	9.14	0.99
75.2	89.6	15.36	8.76	0.72	15.03	8.82	0.86	14.32	8.93	1.00

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	8.95	10.30	0.98	8.62	10.46	1.04	8.34	10.56	1.07
60.8	71.6	10.45	9.98	0.99	10.06	10.12	1.06	9.73	10.21	1.09
64.4	77.0	11.66	9.69	1.01	11.22	9.82	1.07	10.86	9.89	1.11
66.2	80.6	12.20	9.56	1.03	11.75	9.67	1.09	11.36	9.74	1.13
71.6	86.0	13.39	9.20	1.04	12.89	9.29	1.10	12.47	9.34	1.14
75.2	89.6	13.89	8.98	1.05	13.38	9.07	1.12	12.94	9.11	1.16

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
SHC : Sensible Heating Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate

UYH09EALE31(LP096HD3B)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	7.87	7.52	0.49	7.70	7.61	0.59	7.34	7.77	0.68
60.8	71.6	9.18	7.32	0.50	8.99	7.40	0.60	8.56	7.54	0.69
64.4	77.0	10.24	7.13	0.51	10.03	7.21	0.60	9.55	7.33	0.70
66.2	80.6	10.72	7.05	0.52	10.49	7.12	0.61	10.00	7.23	0.72
71.6	86.0	11.76	6.81	0.53	11.52	6.87	0.62	10.97	6.96	0.73
75.2	89.6	12.21	6.67	0.53	11.95	6.72	0.63	11.39	6.81	0.74

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	7.12	7.84	0.72	6.85	7.97	0.77	6.63	8.04	0.79
60.8	71.6	8.31	7.60	0.73	8.00	7.71	0.78	7.74	7.78	0.80
64.4	77.0	9.27	7.39	0.74	8.92	7.48	0.79	8.63	7.53	0.82
66.2	80.6	9.70	7.28	0.76	9.34	7.37	0.80	9.03	7.42	0.83
71.6	86.0	10.65	7.01	0.76	10.25	7.08	0.81	9.91	7.12	0.84
75.2	89.6	11.05	6.85	0.78	10.64	6.91	0.83	10.29	6.94	0.85

UYH12EALE31(LP126HD3B)

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		68			77			89.6		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	9.89	9.87	0.67	9.69	9.99	0.80	9.23	10.20	0.93
60.8	71.6	11.55	9.61	0.68	11.30	9.71	0.81	10.77	9.90	0.94
64.4	77.0	12.88	9.36	0.69	12.61	9.46	0.82	12.02	9.62	0.96
66.2	80.6	13.48	9.25	0.70	13.20	9.34	0.83	12.58	9.49	0.97
71.6	86.0	14.80	8.94	0.71	14.48	9.01	0.85	13.80	9.14	0.99
75.2	89.6	15.36	8.76	0.72	15.03	8.82	0.86	14.32	8.93	1.00

Indoor Air Temperature		Outdoor Air Temperature : DB°F								
		95			104			109.4		
WB°F	DB°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	8.95	10.30	0.98	8.62	10.46	1.04	8.34	10.56	1.07
60.8	71.6	10.45	9.98	0.99	10.06	10.12	1.06	9.73	10.21	1.09
64.4	77.0	11.66	9.69	1.01	11.22	9.82	1.07	10.86	9.89	1.11
66.2	80.6	12.20	9.56	1.03	11.75	9.67	1.09	11.36	9.74	1.13
71.6	86.0	13.39	9.20	1.04	12.89	9.29	1.10	12.47	9.34	1.14
75.2	89.6	13.89	8.98	1.05	13.38	9.07	1.12	12.94	9.11	1.16

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
SHC : Sensible Heating Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate

Heating Capacity

UYH073ALEU1(LP073HDUC)

Indoor Air Temperature	Outdoor Air Temperature : DB°F							
	32		42.8		50		59	
DB°F	TC	PI	TC	PI	TC	PI	TC	PI
60.8	5.89	0.45	6.85	0.49	7.42	0.51	8.19	0.55
64.4	5.71	0.47	6.64	0.50	7.18	0.53	7.93	0.57
68.0	5.54	0.48	6.40	0.52	6.97	0.55	7.69	0.59
71.6	5.34	0.50	6.21	0.54	6.72	0.57	7.41	0.61
75.2	5.15	0.51	5.99	0.55	6.49	0.58	7.16	0.62

Y4NZ09ANLD1(LP093HDUC1)

Indoor Air Temperature	Outdoor Air Temperature : DB°F							
	32		42.8		50		59	
DB°F	TC	PI	TC	PI	TC	PI	TC	PI
60.8	8.10	0.64	9.42	0.69	10.20	0.73	11.26	0.78
64.4	7.85	0.66	9.12	0.71	9.88	0.75	10.90	0.80
68.0	7.61	0.68	8.80	0.74	9.58	0.77	10.58	0.83
71.6	7.34	0.70	8.53	0.76	9.24	0.80	10.19	0.86
75.2	7.09	0.72	8.24	0.78	8.92	0.82	9.84	0.88

Y4NZ12ANLD1(LP123HDUC1)

Indoor Air Temperature	Outdoor Air Temperature : DB°F							
	32		42.8		50		59	
DB°F	TC	PI	TC	PI	TC	PI	TC	PI
60.8	9.67	0.76	11.24	0.82	12.17	0.87	13.4	0.93
64.4	9.36	0.79	10.89	0.85	11.78	0.90	13.0	0.96
68.0	9.08	0.82	10.50	0.88	11.43	0.93	12.6	0.99
71.6	8.75	0.84	10.18	0.91	11.02	0.96	12.1	1.02
75.2	8.45	0.87	9.83	0.94	10.64	0.99	11.7	1.06

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.

UYH153ALEU1(LP153HDUC)

Indoor Air Temperature	Outdoor Air Temperature : DB°F							
	32		42.8		50		59	
DB°F	TC	PI	TC	PI	TC	PI	TC	PI
60.8	12.34	1.10	14.35	1.19	15.53	1.25	17.14	1.34
64.4	11.95	1.14	13.89	1.23	15.04	1.29	16.60	1.38
68.0	11.59	1.17	13.40	1.27	14.59	1.33	16.10	1.43
71.6	11.17	1.21	12.99	1.31	14.06	1.38	15.52	1.47
75.2	10.79	1.25	12.55	1.35	13.58	1.42	14.99	1.52

UYH09EALE31(LP096HD3B)

Indoor Air Temperature	Outdoor Air Temperature : DB°F							
	32		42.8		50		59	
DB°F	TC	PI	TC	PI	TC	PI	TC	PI
60.8	7.83	0.60	9.10	0.65	9.85	0.68	10.87	0.73
64.4	7.58	0.62	8.81	0.67	9.54	0.70	10.53	0.75
68.0	7.35	0.64	8.50	0.69	9.26	0.73	10.22	0.78
71.6	7.09	0.66	8.24	0.71	8.92	0.75	9.85	0.80
75.2	6.84	0.68	7.96	0.73	8.61	0.77	9.51	0.83

UYH12EALE31(LP126HD3B)

Indoor Air Temperature	Outdoor Air Temperature : DB°F							
	32		42.8		50		59	
DB°F	TC	PI	TC	PI	TC	PI	TC	PI
60.8	10.13	0.78	11.78	0.84	12.75	0.88	14.07	0.95
64.4	9.81	0.80	11.40	0.87	12.35	0.91	13.63	0.98
68.0	9.52	0.83	11.00	0.90	11.98	0.94	13.22	1.01
71.6	9.17	0.86	10.67	0.92	11.55	0.97	12.74	1.04
75.2	8.86	0.88	10.30	0.95	11.15	1.00	12.31	1.07

Symbol

DB : Dry Bulb Temperature [°F]
WB : Wet Bulb Temperature [°F]
TC : Total Capacity [kBtu/h]
PI : Power Input [kW]
(Comp.+ indoor fan motor + outdoor fan motor)

Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2. Indicates nominal capacity.

1.8 Electrical characteristics

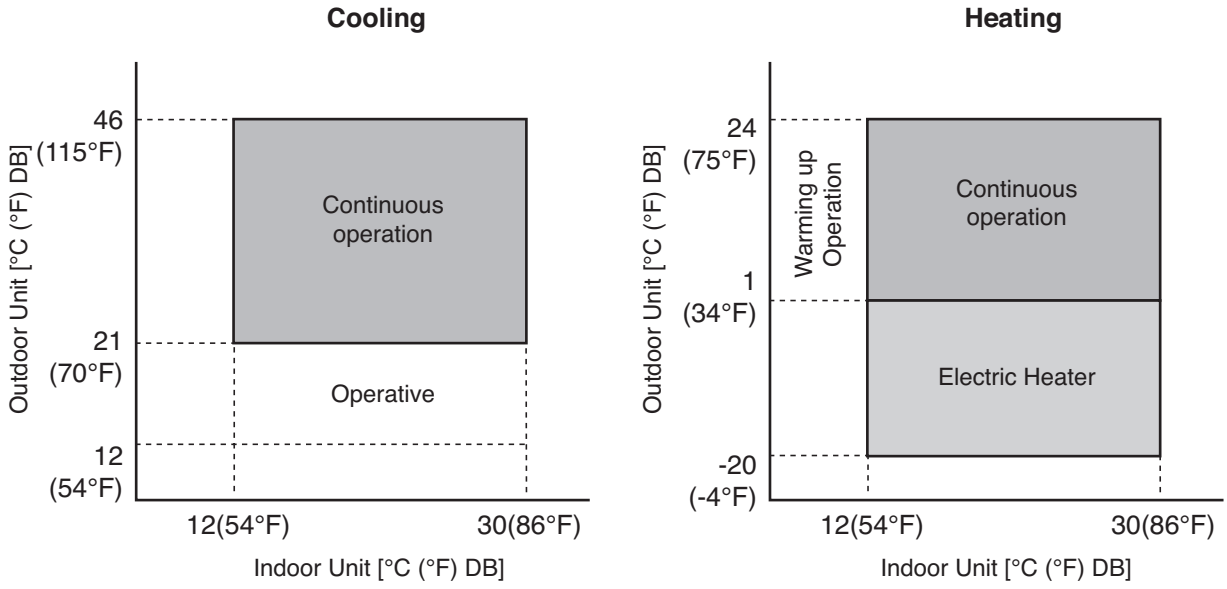
Unit				Power		Compressor		Moter FLA	
Model	Hz	Voltage	Voltage range	MCA	MOP	RLA	LRA	IFM	OFM
UYC073ALEU1(LP073CDUC)	60	208~230	Min:187 Max:253	(208 V) 14.5/19.8/28.3 (230 V) 13.6/18.6/26.2	15/20/30	2.9	16.0	0.36	0.36
UYC093ALEU1(LP093CDUC)						3.7	19.0		
UYC123ALEU1(LP123CDUC)						5.0	27.0		
UYC153ALEU1(LP153CDUC)						6.55	38.6		
UYH073ALEU1(LP073HDUC)						2.9	16.0		
Y4NZ09ANLD1(LP093HDUC1)						4.3	26.0		
Y4NZ12ANLD1(LP123HDUC1)						4.1	27.0		
UYH153ALEU1(LP153HDUC)						6.55	38.6		
UYC09EALE31(LP096CD3B)		265	Min:239 Max:292	17.9	20	3.3	20.0		
UYC12EALE31(LP126CD3B)						4.4	22.0		
UYH09EALE31(LP096HD3B)						3.3	20.0		
UYH12EALE31(LP126HD3B)						4.4	22.0		

Notes :

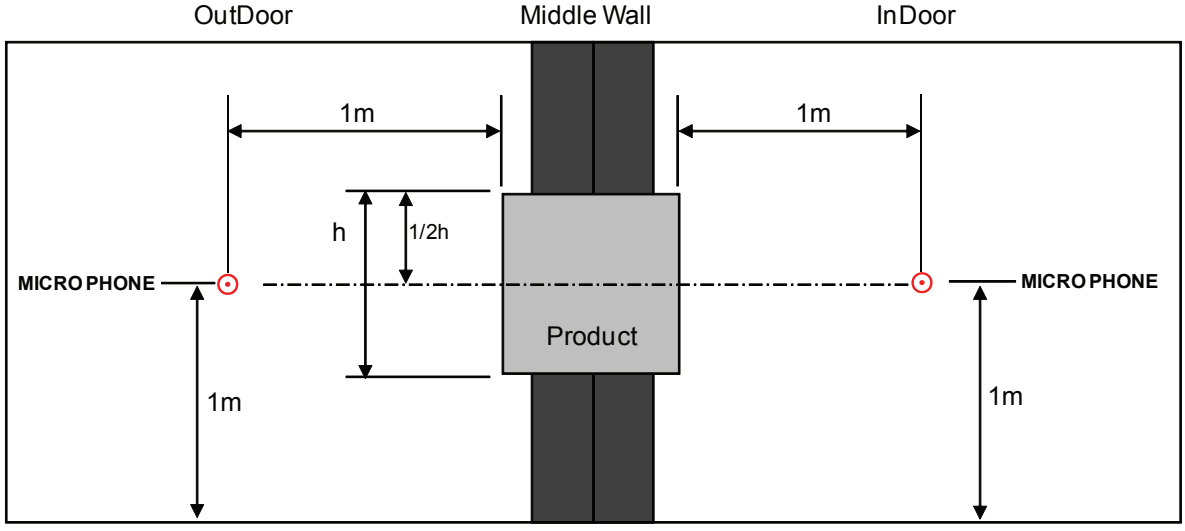
1. Voltage range Voltage supplied to the unit terminals should be within the minimum and maximum range.
2. Maximum allowable voltage unbalance between phase is 2 %.
3. Select wire spec. based on the larger value of MCA.
4. LRA & RLA is measured during each individual compressor test condition.
5. IFM & OFM is measured at unit test condition.
6. Recommended circuit breaker is ELCB (Earth Leakage circuit breaker)

MCA : Minimum Circuit Amperes (A)
MOP : Maximum rating over current protective device (A)
LRA : LRA Locked Rotor Ampere (A)
RLA : Rated Load Amperes (A)
OFM : Outdoor Fan Motor (W)
IFM : Indoor Fan Motor (W)
FLA : Full Load Amperes (A)

1.9 Operation range



1.10 Sound level test method



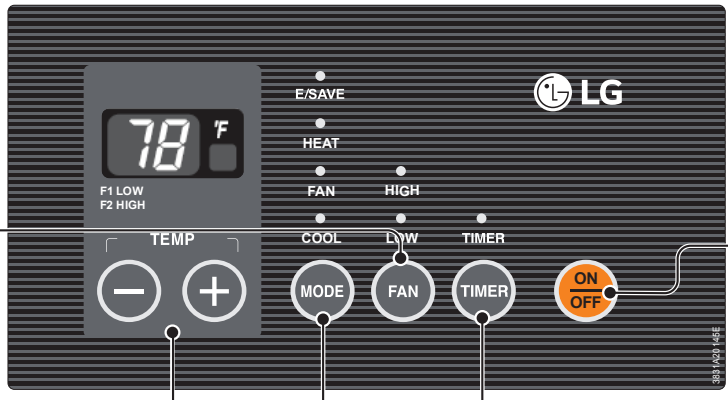
2. Control Device

2.1 Electronic Controls

The Electronic Controls and the panel display is as shown below.

FAN SPEED

• Every time you push this button, it cycles through the settings as follows:
{High(F2)) →Low(F1)) →High(F2)}



POWER

• To turn ON the air conditioner, push this button. To turn OFF the air conditioner, push this button again.
• This button takes priority over any other button.

MODE

- Push this button to cycle through the modes from COOL → FAN →HEAT →COOL.

- COOL
  • Fan runs continually for normal cooling operation.

- ENERGY SAVER
  • The fan stops when the compressor stops cooling. Fan will turn ON when the unit reaches setting temperature even though compressor does not turn on due to 3 minutes delay operation.

- FAN
  • Fan operation without heating or cooling.

- HEAT
  • Fan runs continually for normal heating operation.

TEMPERATURE SETTING

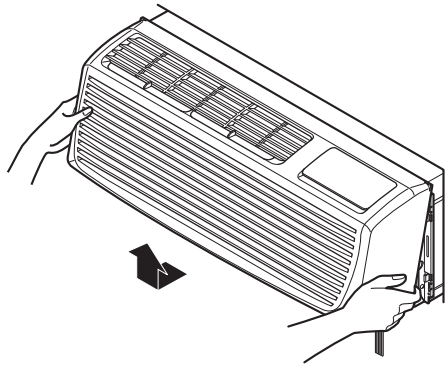
• Use this button to automatically control the temperature of the room.
The temperature can be set within a range of 54°F(12°C) to 86°F(30°C) by increments of 1°F(0.5℃).
• The setting temperature appears in the display.

TIMER

- SHUT-OFF TIME
  • You will usually use shut-off time while you sleep.
  • If unit is running, use Timer to set number of hours until shut-off.
  • For your sleeping comfort, once the time is set the desired temperature will rise 2°F after 30 minutes, and once again after another 30 minutes
  • Push Timer to cycle through the settings from 1 Hour →2 Hours →... →12 Hours maximum.

• REMOVING THE FRONT GRILLE

Additional controls are available after removing the front grille and option cover of control box.
To remove the front grille, pull out the bottom of front grille and then lift up.
To reinstall the front grille, place the tabs over the top of the unit and push the bottom of front grille until the clips snap into place.

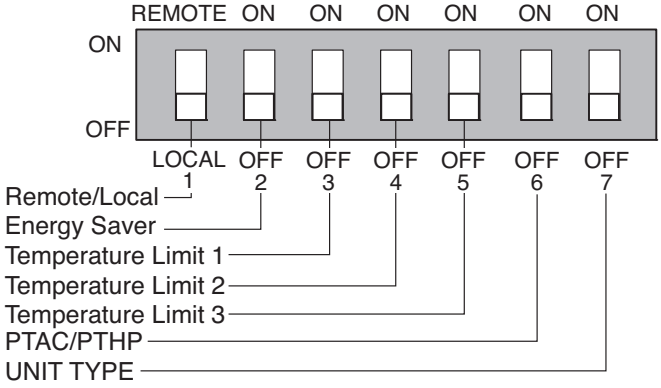


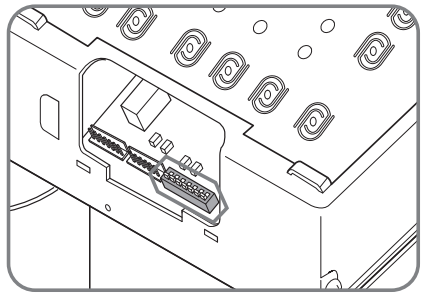
• ADDITIONAL CONTROLS

The additional controls are located behind the option cover of control box. The standard settings will be in the OFF position. The authorized service engineer has to check switches and ensure the switches are in the desired position.

Dip switch setting is done at factory according to product specification.

#6	#7	Unit Type
OFF	OFF	Cooling+Electric Heater+Heat Pump
OFF	ON	Cooling+Electric Heater
ON	OFF	Heat Pump Only
ON	ON	Cooling Only





• TEMPERATURE LIMITING

Temperature Limiting can save money by limiting the lowest temperature for cooling and the highest temperature for heating.
The temperature limiting is controlled by switches #3 - #5.
This temperature limiting is not available with the Remote Wall Thermostat.

#3	#4	#5	Cooling Operation		Heating Operation	
Temperature Limit #1	Temperature Limit #2	Temperature Limit #3	Lowest Temp.	Highest Temp.	Lowest Temp.	Highest Temp.
OFF	OFF	OFF	54°F (12.2°C)	86°F (30.0°C)	54°F (12.2°C)	86°F (30.0°C)
ON	OFF	OFF	56°F (13.3°C)	86°F (30.0°C)	54°F (12.2°C)	84°F (28.9°C)
OFF	ON	OFF	58°F (14.4°C)	86°F (30.0°C)	54°F (12.2°C)	82°F (27.8°C)
ON	ON	OFF	60°F (15.5°C)	86°F (30.0°C)	54°F (12.2°C)	80°F (26.7°C)
OFF	OFF	ON	62°F (16.6°C)	86°F (30.0°C)	54°F (12.2°C)	78°F (25.5°C)
ON	OFF	ON	64°F (17.7°C)	86°F (30.0°C)	54°F (12.2°C)	76°F (24.4°C)
OFF	ON	ON	66°F (18.9°C)	86°F (30.0°C)	54°F (12.2°C)	74°F (23.3°C)
ON	ON	ON	68°F (20.0°C)	86°F (30.0°C)	54°F (12.2°C)	72°F (22.2°C)

• Remote/Local Control

When remote/local switch #1 is on, it allows the unit to operate by the Remote Wall Thermostat.
The unit control by knobs are not applicable.

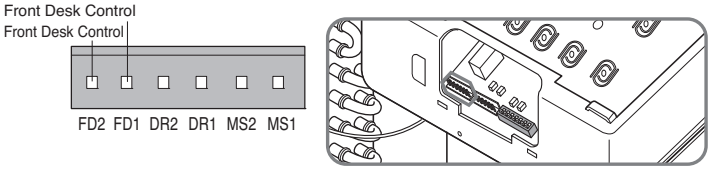
• Energy Saver

When the energy saver switch #2 is on, it allows the fan to provide continuous operation in cool or heat modes. When the switch is off, it allows continuous circulation of room air to provide a balanced temperature in the room.

• Front Desk Control

When the pair wire is connected to the connector FD2 and FD1, the unit can be turned ON or OFF with a switch located at the Front Desk Control panel. When the front desk switch is ON, the fan operates according to the setting without working compressor and heater. When the front desk switch is OFF, the unit can operate according to the setting of controls.

Wire # AWG	Maximum Length
#22	600 ft (180 m)
#20	900 ft (270 m)
#18	1500 ft (450 m)
#16	2000 ft (610 m)

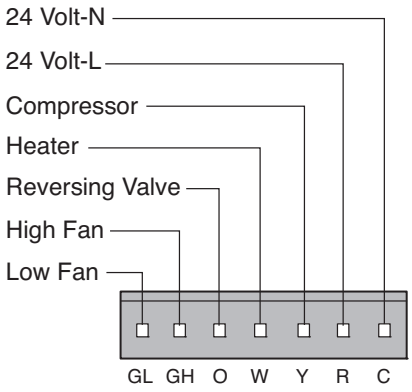


(Molex Housing Spec 396-06V)

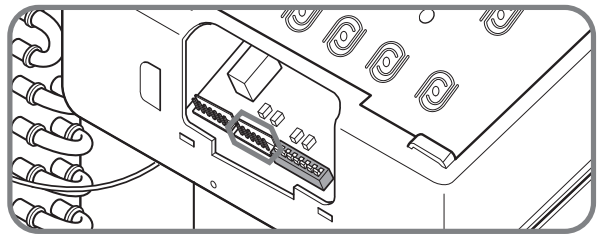
Remote Wall Thermostat

When the wires are connected, the unit will be controlled by a remote wall thermostat.

The thermostat connections supply the 24 Volt AC. When you install the digital/electronic thermostat, you must set it to 24 Volt AC.



(Molex Housing Spec 396-07V)



NOTE:

For wiring connection of Wall Thermostat, check the Installation instruction or Installation manuals provided by thermostat company.

DISPLAY FUNCTION:

If the unit has a malfunction, a green OPERATION LED on the Display PCB indicates the errors.

Customer Notification:

If the customer has to register a complaint to the service center, they should provide clear information about the problem so that the service provider prepared with the necessary tools when they arrive on site. The LED indicator will flash for the following reasons:

• Electrical Controls

Fault Codes	Description of Inspection	Cause of Error	Check Point
CH 01	Indoor Air Thermistor Error	The Indoor Air Thermistor Error occurs when the indoor temperature is ≤-35°C or ≥100°C.	• Check the error after change sensor. • Check the insertion of PCB Connector Wafer.
CH 02	Indoor Coil Thermistor Error	The Indoor Coil Thermistor Error occurs when the indoor pipe temperature is ≤-35°C or ≥100°C.	• Check the error after change sensor. • Check the insertion of PCB Connector Wafer.
CH 07	Themostat Wiring Error	The Thermostat Wiring Error has occurred if the PTAC receives control commands that cannot be driven from the Thermostat.	• Check the connection with Themostat comparing with manual.
CH 09	EEPROM Check Sum Error	The EEPROM Check Sum Errors occurs when the original check sum and calculated check sum do not match.	• Check the insertion of EEPROM. • Unplug and plug the power code
CH 10	Indoor Fan Error	The Indoor Fan Error occurs when there is not feedback signal from Hall sensor located in BLDC Motor in 50 seconds delay time or feedback signal lower than 50RPM (applied in models using the BLDC Motor).	• Check the insertion of BLDC Connector. • Check whether the output voltage between the two terminals 4-5pins in CN-MOTOR-ODF is 15V. • Check whether the output voltage between the two terminals 4-6pins is over 2V. • Check whether the output voltage between the two terminals 4-7pins is exist or not.
CH 34	High Pressure Switch Error	The High Pressure Switch Error occurs when the high pressure switch opens for 65 milliseconds more than 10 times in 1 hour.	• Check the existence of short key between CN-PRESS. • Check the insertion of PCB Connector Wafer.
CH 44	Outdoor Air Thermistor Error (PTHP Only)	The Outdoor Air Thermistor Error occurs when the outdoor air temperature is ≤ -35°C or ≥100°C.	• Check the error after change sensor. • Check the insertion of PCB Connector Wafer.
CH 45	Outdoor Coil Thermistor Error (PTHP Only)	The Outdoor Air Thermistor Error occurs when the outdoor air temperature is ≤-35°C or ≥100°C.	• Check the error after change sensor. • Check the insertion of PCB Connector Wafer.
CH 67	Outdoor Fan Error	The Outdoor Fan Error occurs when there is no feedback signal from the Hall sensor located in BLDC Motor in 50 seconds delay time or feedback signal lower than 50RPM (applied in models using the BLDC Motor).	• Check the insertion of BLDC Connector. • Check whether the output voltage between the two terminals 4-5pins in CN-MOTOR-ODF is 15V. • Check whether the output voltage between the two terminals 4-6pins is over 2V. • Check whether the output voltage between the two terminals 4-7pins is exist or not.

Function	Description	Display code
Over heating Protection	This feature prevents the unit from overheating in heat mode during remote thermostat operation	
Freeze Protection	This feature prevents the room from freezing due to low temperatures	
Remote Mode	This code indicates that dip switches have been set for remote wall-mounted thermostat mode.	

Part 3 Design and Installation

1. General Installation Procedure

Installation Procedure	Remarks
Determination of work scope	Check and confirm required load calculation, model selection etc…
Selection of suitable location for unit	The base or the foundation of the Air-Conditioner should be firm and vibration proof and air-flow should not be restricted on either side of the unit - front and the back.
Installation of Wall sleeve	Check out the Wall opening to make sure the Wall sleeve fits properly.
Installation of indoor unit	Check the size of the selected model and make sure the fitting is made correctly.
Drain pipe work	Make sure the drain pipe is big enough and adjust it to a downward gradient.
Insulation works	The Air-Conditioner supporting parts should secure firmly to the wood, masonry and metal.
Fit Outer Grille	The Air Conditioner should be protected from physical contact with animals or any external object.
Transfer charge to customer	Educate the customer or the operator on how to operate the Air-Conditioner and the utility of the manuals.

2. Installation of unit

2.1 Safety precautions

To prevent injury to the user or other people and property damage, the following instructions must be followed.

■ Incorrect operation due to ignoring instructions will cause harm or damage. The seriousness is classified by the following indications.

■ Because of the weight of the product, it is recommended that you have a helper to assist in the installation.

⚠WARNING	This symbol indicates the possibility of death or serious injury.
⚠CAUTION	This symbol indicates the possibility of injury or damage to properties only.

■ Meanings of symbols used in this manual are as shown below.

	**Be sure not to do.**
	**Be sure to follow the instruction.**

2.2 Points for explanation about operations

The items listed under the WARNING and CAUTION list in the operation manual are the items pertaining to possibilities for physical injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the owners manual.

to the installer

Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

- Be sure to read this manual before installing the indoor unit.
- Entrust the duty of installation to the place of purchase or an authorized serviceman. Improper installation could lead to damage of the product, physical injury , electric shock or fire.
- Use parts only provided along with the unit or parts satisfying required specifications.
  Unspecified parts could cause the unit to fall out of place, or could lead to leaks and in the worst cases, electric shock or fire.

2.3 Selecting installation site for the unit

Select an installation site where the following conditions are fulfilled and that meet your customers approval.

1) Location should be strong enough to bear the weight of the unit.
2) Location should be accessible to inspection and service in future.
3) Location should allow suitable gradient for the drainage of water.
4) Location free from electrical noise.
5) Location allowing optimum air distribution without restricting air flow.
6) Location having no risk of flammable gas leakage.
7) Location free from any machinery emitting electromagnetic waves which may disturb the control system thus causing the unit to malfunction.
8) Location should be free from flammable gases, carbon fiber or ignitable dust suspensions in the air or in areas where volatile flames like gasoline and thinner are handled. Operating the unit in such conditions may lead to fire.
9) Finally conform to local rules and regulations for air conditioner installation.

⚠ WARNING

Do not use a damaged power cord, plug or loose socket.

• Otherwise there is risk of fire or electric shock.

Always plug onto a grounded outlet.

• Otherwise there is risk of fire or electric shock.

Do not extend or modify the power cord length.

• Otherwise there is risk of fire or electric shock due to heat generation.

Do not install, remove or reinstall the unit by yourself.

• Otherwise there is risk of fire, electric shock, explosion or injury.

Be cautious when unpacking and installing the product.

• Sharp edges could cause injury. Especially be careful of the case edges and the fins on the condenser and evaporator.

Do not store or use flammable gas or combustibles near the Air-Conditioner.

• Otherwise there is risk of fire, explosion or failure of product.

Be sure the installation area does not deteriorate with time.

• If the base collapses then the Air- Conditioner might fall causing property damage, product failure and personal injury.

Do not place heavy object on the power cord and take care that the cord is not pressed.

• Otherwise there is a danger of fire or electric shock.

Do not share the outlet with other appliances.

• Otherwise there is a risk of fire or electric shock due to heat generation.

While unplugging, hold the head of the plug and do not touch it with wet hands.

• Otherwise there is a risk of fire or electric shock.

Do not place the power cord near a heater.

• Otherwise there is a risk of fire or electric shock.

Do not allow water to run into electric parts.

• Otherwise there is a risk of electric shock or failure of the unit.

Use a soft cloth to clean. Do not use wax, thinner or a strong detergent.

• Otherwise the appearance of the Air-Conditioner may deteriorate, change color or develop flaws on the surface.

Unplug the unit if any strange sound, odor or smoke comes out of it.

• Otherwise there is a risk of fire or electric shock.

Do not open the inlet grille of the product during operation.

• Otherwise it may cause electric shock and failure.

If water enters the product, turn off the power switch, remove the power plug from the socket and contact the service center immediately.

• Otherwise it may cause electric shock and failure of the product.

Ensure proper ventilation in the room when using this appliance together with a stove.

• Otherwise there may be a shortage of oxygen.

Before cleaning the unit turn off the power to the unit.

• The fan blows at a high speed and may cause injury. Also the appliance may cause electric shock.

Turn off the main power switch when the unit is not used for a long time.

• We can prevent accidental startup and thereby prevent injury.

Do not operate or stop the unit by inserting or pulling out the power plug.

• Otherwise it may cause electric shock or fire due to heat generation.

Do not use a damaged power cord and do not use an unspecified power cord.

• Otherwise it may cause electric shock or fire.

Do not operate the unit with wet hands or in a damp environment.

• Otherwise it may cause electric shock or fire.

Always hold the plug by the head while plugging or unplugging it onto the socket.

• Otherwise it may cause electric shock or it may damage the power cord.

When there is a gas leakage, open the windows for ventilation before operating the unit.

• There is a risk of fire or explosion.

Take care not to touch the metal parts of the Air-Conditioner while removing the filter.

• Presence of sharp metal parts may cause injury.

During installation and un installation always contact the dealer of an Authorized service center.

• Otherwise there is a risk of fire, electric shock, explosion or injury.

Be sure only to use those parts which are listed in the service parts list. Never attempt to modify the equipment.

• Use of parts not listed in the service list can cause an electrical shock, excessive heat generation or fire.

Safely dispose of the packing materials.

• Things like screws, nails, batteries, etc….can cause injury to a person. Take care to throw away the plastic packaging bags so that children may not play with them.

Do not touch, operate or repair the product with wet hands.

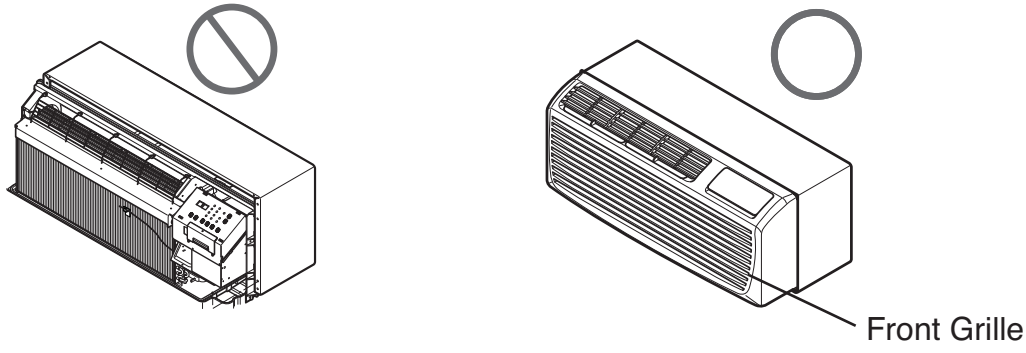
• Otherwise there is a risk of electric shock or fire.

Do not allow water to run into electric parts. Install the unit away from water sources.

• Otherwise there is a risk of fire, electric shock or failure of the product.

Do not operate the product without front grille assembly (see below figure)

• Otherwise it may cause physical injury and failure of the product.



⚠CAUTION

Install the product in such a way that the noise or hot wind from the outdoor unit may not cause any disturbance to neighbors.

• Otherwise there may be disputes with neighbors.

During installation the unit should be level front-to-back and side-to-side.

• Otherwise it may cause vibration or water leakage.

Do not allow pets or house plants to have direct exposure to the airflow from the unit.

• Otherwise it may cause injury to them.

Do not block the flow of air into the inlet and the outlet.

• Otherwise it may lead to failure of the product.

Use a soft cloth to clean. Do not use wax, thinner or a strong detergent.

• Otherwise the appearance of the air conditioner may deteriorate, change color and develop flaws on the surface.

Do not step on the unit and do not place anything above it.

• Otherwise the unit may fall and cause personal injury.

Always place the filter securely and clean it every two weeks.

• Operation without filters may cause the unit to fail.

Do not drink water drained by the air-conditioner.

• The drained water contains contaminants and can make you sick.

Be cautious not to touch the sharp edges during installation.

• Otherwise it may cause injury.

Avoid excessive cooling and ventilate the room at times.

• Use the ventilation function to circulate air without cooling or heating.

Do not try to lift the unit alone.

• Avoid personal injury.

Do not install the product where it is exposed to sea wind (salt spray) directly.

• Otherwise it may corrode the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient operation.

Install the drain hose so as to ensure that the water is drained properly.

• Otherwise there might be water leakage.

Replace all the batteries in the remote control with new ones of the same type.
Do not mix old and new batteries or different type of batteries.

• Otherwise there is a risk of fire or explosion.

If the liquid from the batteries gets onto your skin or clothes, wash it well with clean water. Do not use the remote controller if the batteries have leaked.

• Otherwise the chemicals in the batteries may cause burns or other health hazards.

Do not use the product for purposes such as preserving foods, works of art, etc…It is a consumer air conditioner not a precision refrigeration system.

• Otherwise there is risk of damage or loss to property.

Do not recharge or disassemble the batteries. Do not dispose off batteries in fire.

• Otherwise the batteries may burn or explode.

Do not clean the air conditioner using water.

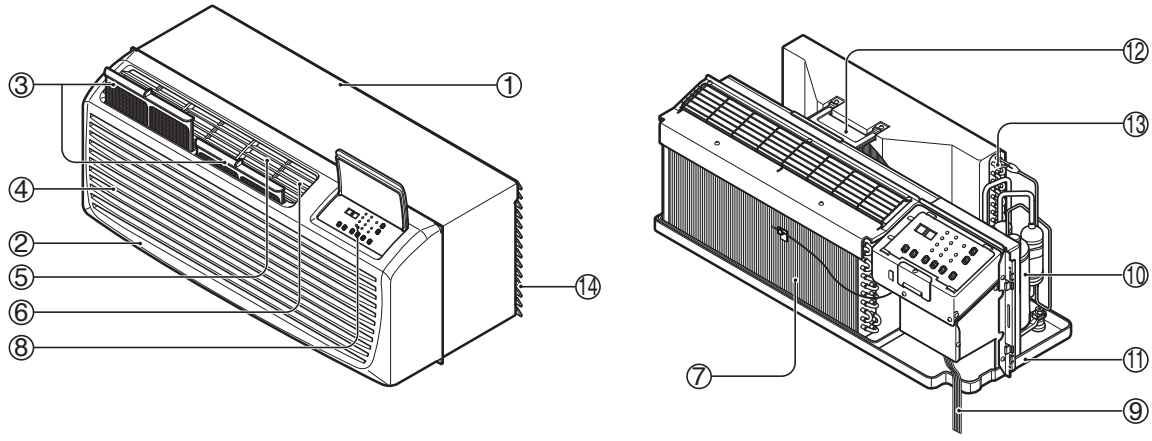
• Water may enter the unit and degrade the insulation. Hence, it may cause an electric shock.

Ventilate well when used near a stove.

• Otherwise there may be a lack of Oxygen in the room.

2.4 Installation of unit

The PTAC and its components are as shown below.

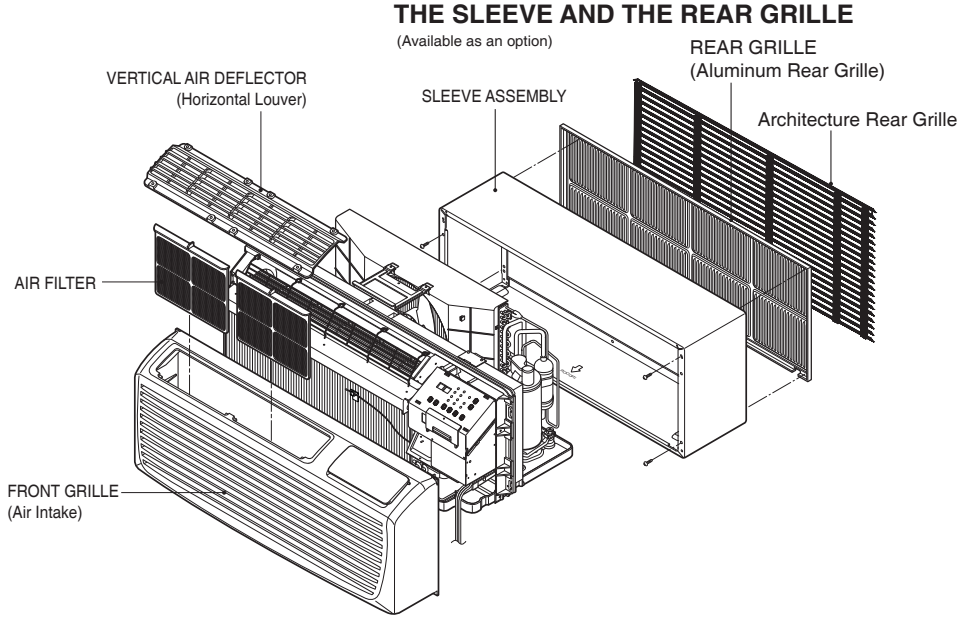


1. WALL SLEEVE
2. FRONT GRILLE
3. AIR FILTER
4. AIR INTAKE
5. AIR DISCHARGE
6. VERTICAL AIR DEFLECTOR (HORIZONTAL LOUVER)
7. EVAPORATOR
8. CONTROL PANEL
9. POWER CORD
10. COMPRESSOR
11. BASE PAN
12. BRACE
13. CONDENSER
14. OUTDOOR GRILLE (ARCHITECTURAL GRILLE)

Use the correct wall sleeve and outdoor grille

This unit is designed to be installed in the insulated wall sleeve. When you place the unit into the existing sleeve, the wall sleeve used to mount the new unit must be in good structural condition and have the outdoor grille that securely attaches to the sleeve or the flange of the sleeve to secure the new air conditioner.

Remove the vertical deflectors in the existing grille to reduce condenser air recirculation that can cause inefficient cooling or heating, or even cause product failure.



⚠ CAUTION

- There are sharp edges that can cause serious cuts.
- When lifting the air conditioner.
  Use 2 people to life the air conditioner.(the unit is heavy)

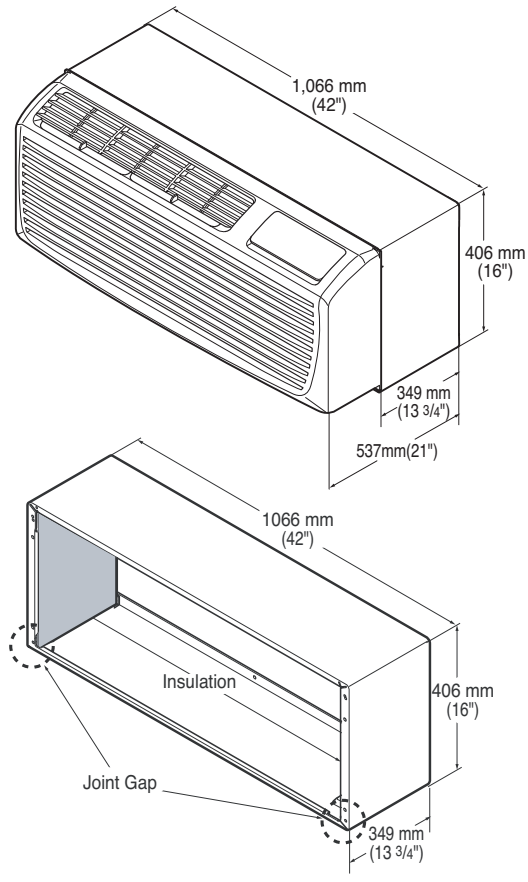
For existing sleeve, you should measure the wall sleeve dimensions.
Install the new air conditioner according to these installation instructions to achieve the best performence. The wall sleeve used to mount the new air conditioner must be in good structural condition and have a rear grille that securely attaches to the sleeve or the flange of the sleeve to secure the new air conditioner.

- To avoid vibration and noise, make sure the unit is installed securely and firmly.

When installing the sleeve, make certain there is nothing within 20'' of the back of sleeve and front of front grille that would interfere with heat radiation and exhaust air flow.

⚠ CAUTION

- Before installation, check the insulation on the inner side of the sleeve. If there is no insulation, place the insulation.
- Check the bottom corner's joint gap of sleeve. If there is a gap, fill it with putty.

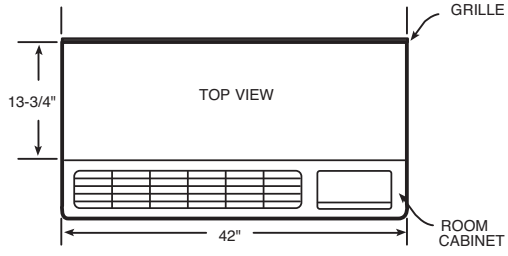


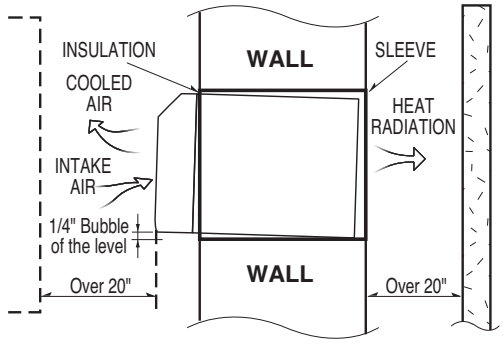
Wall opening 16-1/4"x42-1/4"

Recommended

To maintain the best performance of LG PTAC

1. An insulation strip must be attached. The insulation strip is provided with the box.
2. After assembly of unit with sleeve and front grille, the gap should be over 20" from both sleeve and front grille. For assembly, refer to the diagram in the PTAC manual.

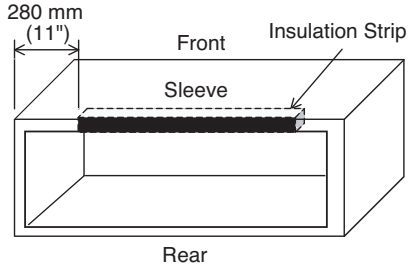




Installation Check Points:

1) Take out the insulation strip from the upper packing.

2) Attach the insulation strip onto the rear upper side of the wall sleeve.



2.5 WALL SLEEVE INSTALLATION

Wall Case Installation Data

General

Generally, units are installed 3" to 5" above the floor (flush to finished floor installation is possible) as near to the center of the room as possible; underneath a window or a glass panel is typical. Normal installation of the wall case allows installation flexibility; from flush with the finished interior wall to a minimum of 1/4" of the wall case extending beyond the finished exterior of the building.

Special consideration must be given to installations where the wall case does not extend a minimum of 1/4" beyond the finished exterior wall.

Regardless of the installation, there are several things to consider when selecting a location for installing the unit. For instance, drapery location could interfere with air discharge, and placement of furniture may have an impact on the performance of the unit. The following information is intended to minimize installation problems and assure you of a trouble-free installation.

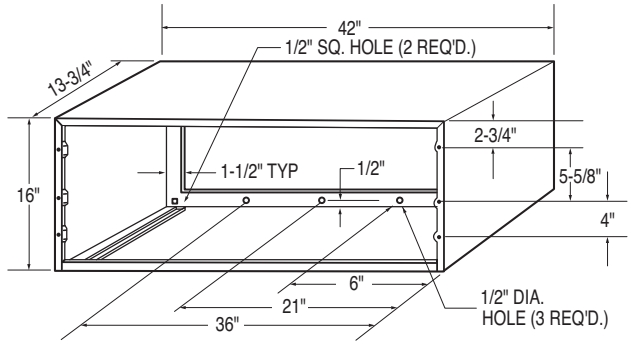
Refer to pages 60-61 for required wall opening dimensions. Minimum recommended interior and exterior case projection for standard wall thicknesses are shown in the drawings. The case may be installed flush with the finished indoor wall.

Mounting an outdoor grille or louver section to the building face may cause a space between the outdoor coil and the louver section. Air splitters, aligned with the ends of the outdoor coil, must be installed between the outdoor coil inlet and outlet air streams. Gaps between the outdoor coil and the louver section may allow condenser air recirculation and affect the operation of the unit.

The wall case should be level from side to side and from level to 1/4 bubble tilt to the outdoors. The condensate disposal system in the unit is designed to dissipate the condensate water generated during cooling operation in accordance with ARI standards and actually uses this water for maximum unit efficiency. A level unit will also insure proper performance of the Internal Condensate Removal (ICR) system optional on heat pump units.

For new construction, early planning with the architect is necessary. Unit location, electrical connection locations, and wall openings of proper dimension are essential to avoid the necessity of rework, fillers, framing, moving electrical outlets, and other expensive modifications.

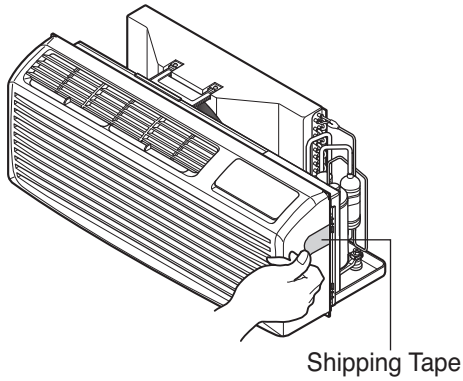
For existing construction it is important that carpentry, masonry and electrical work be performed by competent, qualified personnel. **Since installations in existing construction may involve removal of building material from the structure, location of the wall case must be precisely done.**



Wall opening 16-1/4"x42-1/4"

Preparation of the front grille

Carefully remove shipping tape from the front grille.



Brick, Frame, Stucco and Shingle Construction

For new construction, the opening for the wall case should be framed and inserted into the opening during construction. Lintels should be used when the building material is heavy and is not self supporting (such as brick). The wall case will fit an opening of six courses of standard brick or five courses of jumbo brick. Wall framing in this type construction is normally on 16" centers and the wall case will fit a framed opening spanning three 16" O.C. 2" x 4" stud spaces.

For existing construction the indoor and outdoor wall will need to be cut out, allowing for clearances of 1/8" on all sides of the wall case. Work should begin on the inside wall. Cut the correct dimensions and mark (using drill holes) the outside wall from each corner of the inside cutout. Studding that interferes with the opening must be removed and a suitable frame constructed to secure the wall case and provide adequate support for case and chassis.

Preparation of the Wall Case for All Types of Construction

As shipped, the LG wall sleeve is ready for installation.
Do not remove the stiffener from inside the wall case or the weather closure panel from the outside face of the wall case until the outdoor grille and chassis are ready to be installed.

Installation of Wall Case in Wall Opening

1. Position the wall case into the wall. The room side edge of the wall case should be at least flush with the finished wall for line cord installations and permanent connection installations when no sub-base is used, and should project into the room at least 2-3/8" when a sub-base is used. If the minimum exterior dimensions are not met, refer to page 60.

   The outside edge of the wall case should extend at least 1/4" beyond the outside wall.
   This is necessary for proper caulking, to prevent sealing thedrain holes in the rear flange of the wall case, and to facilitate the installation of an accessory drain, if used.

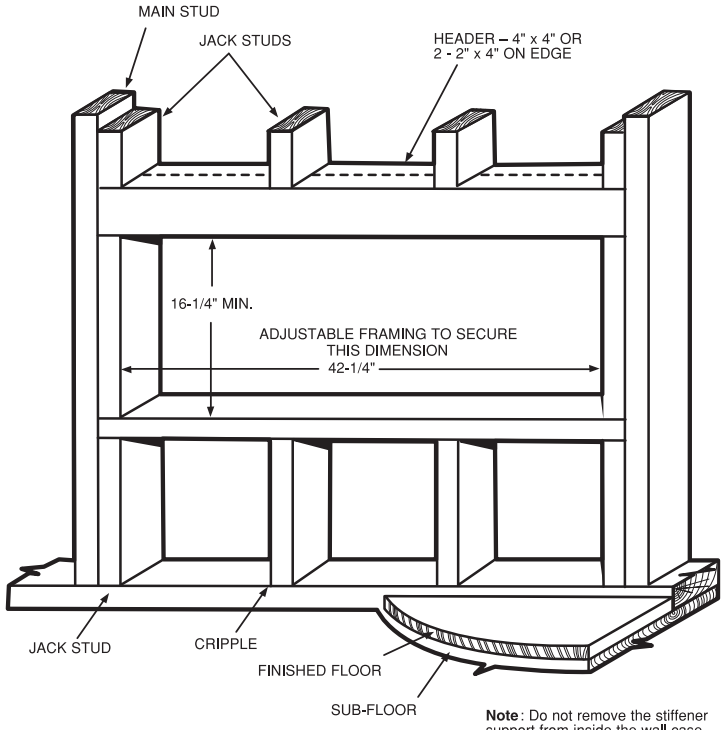
   The wall case should be level from side to side and from level to 1/4 bubble tilt to the outdoors. The condensate disposal system in the unit is designed to dissipate the condensate water generated during cooling operation in accordance with ARI standards and actually uses this water for maximum unit efficiency. A level unit will also insure proper performance of the Internal Condensate Removal (ICR) system optional on heat pump units.

2. The wall case should be secured to the wall at both sides.
   Use a minimum of two screws or other fastening device on each side. See Figure 2 page 60. Mark the wall case on each side 2" from the bottom and 2" from the top at a point where basic wall structure is located. Drill wall case and use fasteners appropriate for wall construction. All holes for fasteners in the side of the wall case must be at least 2" up from the bottom of the wall case.
   Never fasten screws or put other holes in the bottom of the wall case.
   If the wall opening is greater than the case dimensions, spacers must be used on the sides between the wall case and the wall support structure to prevent distorting the wall case.
3. Caulk or gasket the entire opening on the outside between the wall case and exterior wall surface (4 sides) to provide total water and air seal.
4. Caulk or gasket room-side opening between wall case and interior wall surface (4 sides). Opening beneath or around the wall case can allow outdoor air to leak into the room resulting in increased operating costs and improper room temperature control.

Care should be taken in location of electrical supply entry in relationship to wall sleeve to assure access to receptacle or junction box once unit is installed.

FRAMING FOR WALL CASE

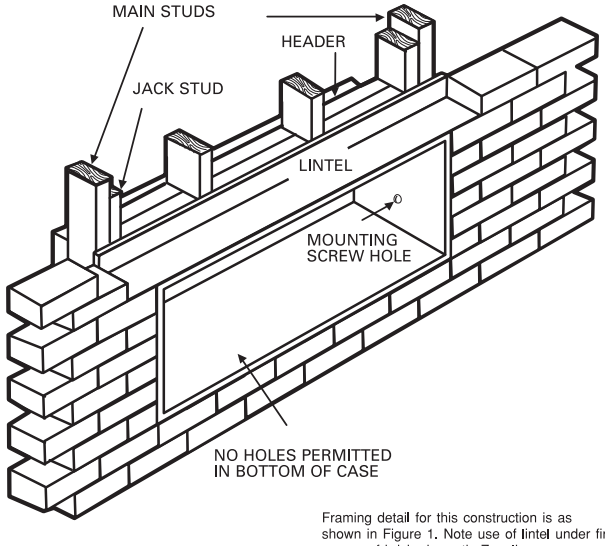
BRICK VENEER AND FRAME CONSTRUCTION



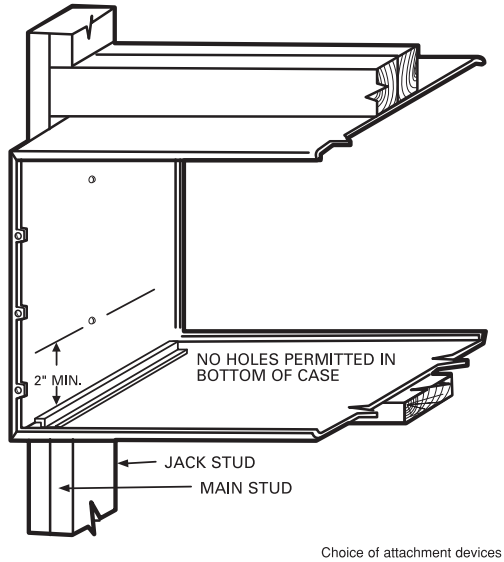
Note: Do not remove the stiffener support from inside the wall case until the chassis is to be installled.

Figure 1

FASTENING WALL CASE

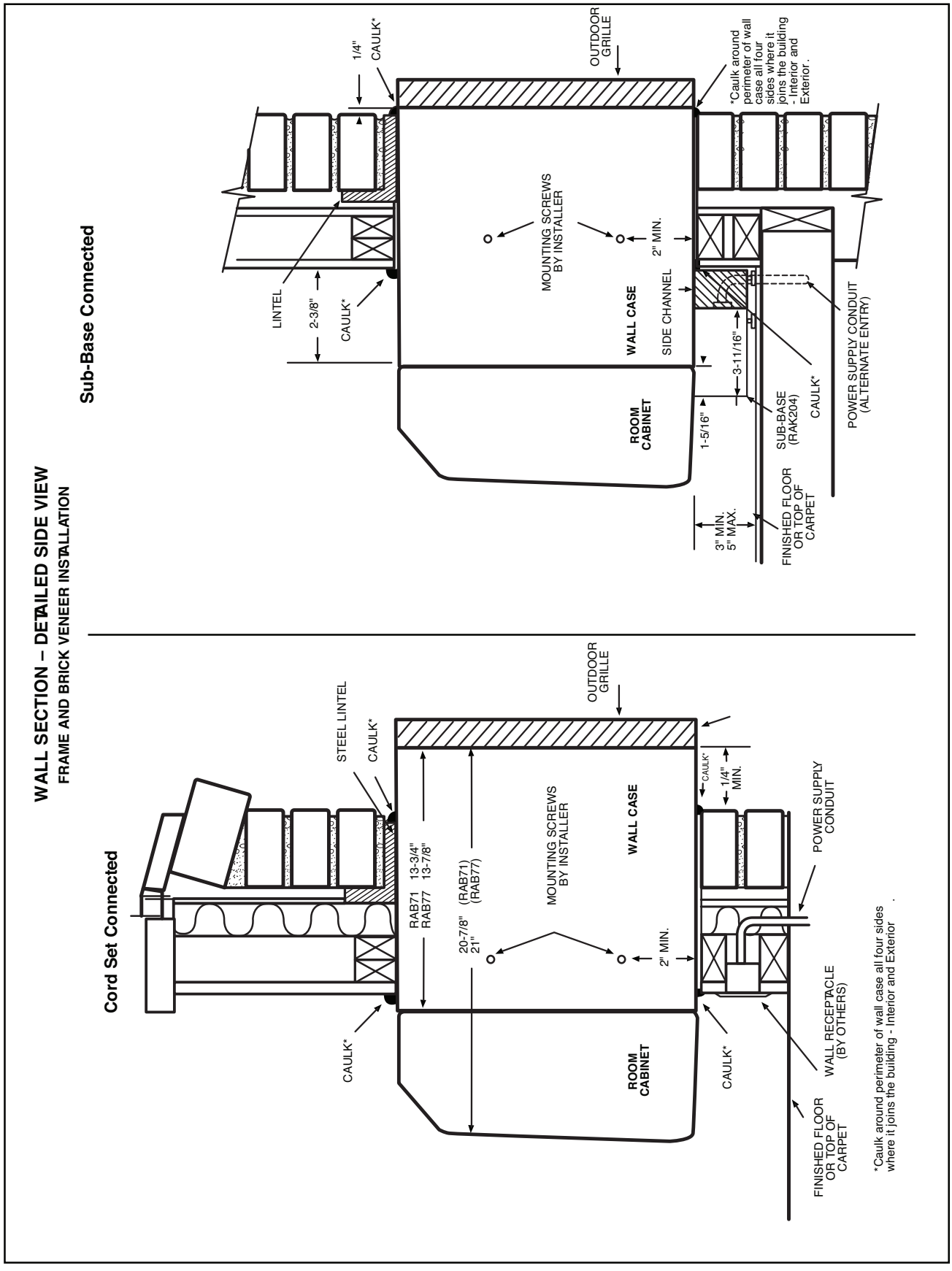


Framing detail for this construction is as shown in Figure 1. Note use of lintel under first course of brick above theZoneline case. Do not use the case as alintel. Mounting screw holes shown are tobe made by the installer



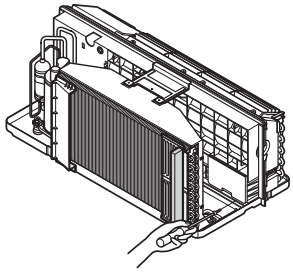
Choice of attachment devices through both ends of case or thetop. Mounting screw holes and attachment devices by installer.

Figure 2

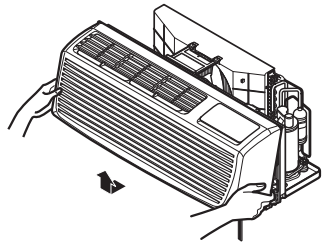

WALL SECTION – DETAILED SIDE VIEW
FRAME AND BRICK VENEER INSTALLATION
Sub-Base Connected
OUTDOOR GRILLE
1/4"
CAULK*
*Caulk around perimeter of wall case all four sides where it joins the building - Interior and Exterior.
MOUNTING SCREWS BY INSTALLER
2" MIN.
LINTEL
2-3/8"
CAULK*
WALL CASE
SIDE CHANNEL
3-11/16"
ROOM CABINET
1-5/16"
SUB-BASE (RAK204)
CAULK*
POWER SUPPLY CONDUIT (ALTERNATE ENTRY)
3" MIN.
5" MAX.
FINISHED FLOOR OR TOP OF CARPET
Cord Set Connected
OUTDOOR GRILLE
STEEL LINTEL
CAULK*
CAULK*
1/4" MIN.
POWER SUPPLY CONDUIT
RAB71 13-3/4"
RAB77 13-7/8"
20-7/8" (RAB71)
21" (RAB77)
MOUNTING SCREWS BY INSTALLER
WALL CASE
2" MIN.
CAULK*
ROOM CABINET
CAULK*
WALL RECEPTACLE (BY OTHERS)
FINISHED FLOOR OR TOP OF CARPET
*Caulk around perimeter of wall case all four sides where it joins the building - Interior and Exterior .

• Unit Installation

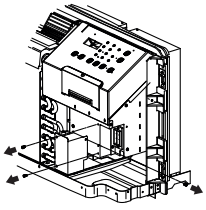
1. Remove the shipping screw from the ventilation door.



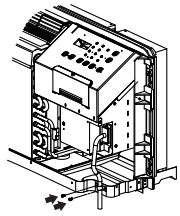
2. Remove the front grille by pulling it out at the bottom to release it, then lift it up along the unit top front.



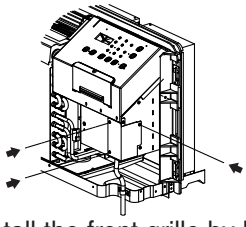
3. Remove cover by removing 3 screws from front.



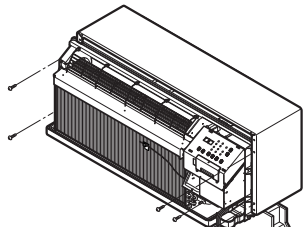
4. Connect accessory power supply cord, and fix power cord to basepan with screws.



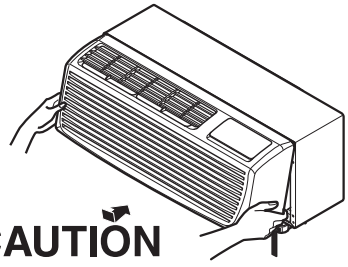
5. Replace cover with screws. Tighten securely.



6. Slide the unit into the wall sleeve and secure with 4 screws through the unit flange holes.

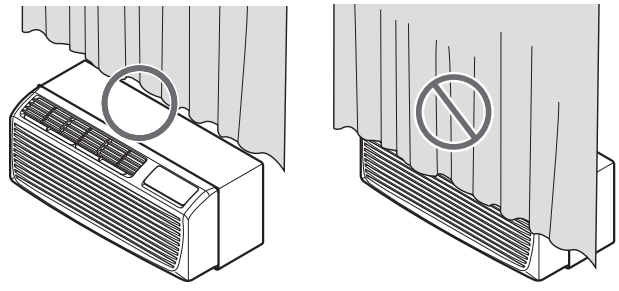


7. Reinstall the front grille by hooking the top over the unit top, then pushing it in at the bottom.

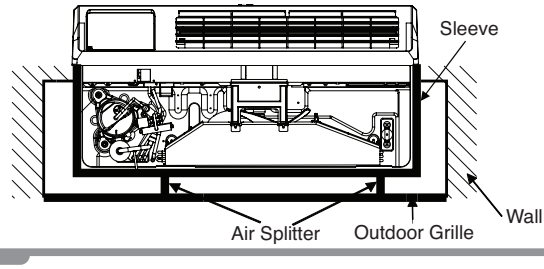


⚠ CAUTION

- Failure to follow this caution may result in equipment damage or improper operation.
- Blocking indoor(curtain or bedclothes etc.) or outdoor discharge air could cause premature failure of unit.



- If there is a gap between the rear side of the product and the outside wall, the air splitter need to be used on unit.



ELECTRICAL SAFETY *IMPORTANT (PLEASE READ CAREFULLY)*

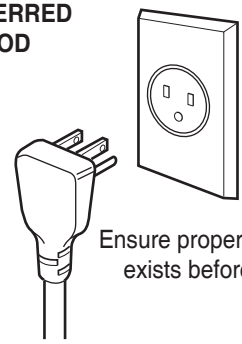
FOR THE USER'S PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED

The power cord of this appliance is equipped with a three-prong (grounding) plug. Use this with a standard three-slot (grounding) wall power outlet to minimize the hazard of electric shock. The customer should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

DO NOT CUT OR REMOVE THE THIRD (GROUND) PRONG FROM THE POWER PLUG.

FUSE – Use a time - delay fuse or circuit breaker. Refer to the nameplate for proper power supply requirements.

PREFERRED METHOD



Ensure proper ground exists before use

⚠ CAUTION

1. Do not use an extension cord with this unit.
2. When the unit is in the OFF position, the power supply to the electrical controls is still energized.
3. Disconnect the power to the unit before servicing the unit.
4. Remove the power cord from the wall receptacle.
5. Remove or turn off the protective device (fuses or circuit breaker).

Wirings including installation of the receptacle must comply with the NEC and local codes, local regulations.

FUSE- Use a time-delay fuse or circuit breaker. Refer to the nameplate for proper power supply requirements.

Use Wall Receptacle	Power Supply	Applied Model
 Standard 208/230V, 3-wire grounding receptacle rated 15A	Use 15 AMP. time delay fuse or 15 AMP. Circuit breaker.	LP073CDUC, LP093CDUC, LP123CDUC, LP153CDUC, LP073HDUC, LP093HDUC1, LP123HDUC1, LP153HDUC
 Standard 208/230V, 3-wire grounding receptacle rated 20A	Use 20 AMP. time delay fuse or 20 AMP. Circuit breaker.	
 Standard 208/230V, 3-wire grounding receptacle rated 30A	Use 30 AMP. time delay fuse or 30 AMP. Circuit breaker.	
 Standard 265V grounding receptacle rated 20A	Use 20 AMP. time delay fuse or 20 AMP. Circuit breaker.	LP096CD3B, LP126CD3B, LP096HD3B, LP126HD3B
 Standard 265V grounding receptacle rated 30A	Use 30 AMP. time delay fuse or 30 AMP. Circuit breaker.	-

Installation(for 60Hz)

Electric installation requirement for personal safety:

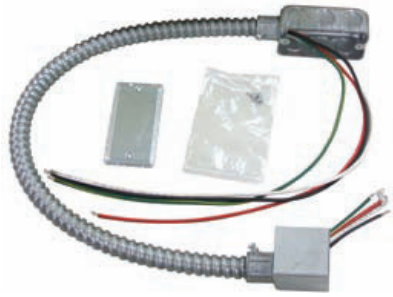
- This equipment must be properly connected to ground.
- Under no circumstances cut or break the grounder conductor.
- We recommend not to use an extension wire or any adaptor with this product.
- Follow the national or local electric codes.
- If the power supply does not fulfill the specifications previously mentioned, call an authorized electrician.
- The aluminum wired in the houses may bring about some problems, call an authorized electrician.
- This unit requires a separated power supply that works only for this application.

Part 4 Accessories

1. Controller accessories

1.1 Hard Wire Kit (265 V ONLY)

The Hard Wire kit consists of a Junction box which provides a protective enclosure for the electrical connections. This junction box is furnished with approximately 2 - 1/2 feet of 1/2 inch flexible steel conduit and a metal box that secures to the PTAC at the control panel. The Hard Wire kit connects the PTAC directly to the building power supply wires and the junction box is intended to be mounted on the wall or the floor near the PTAC.

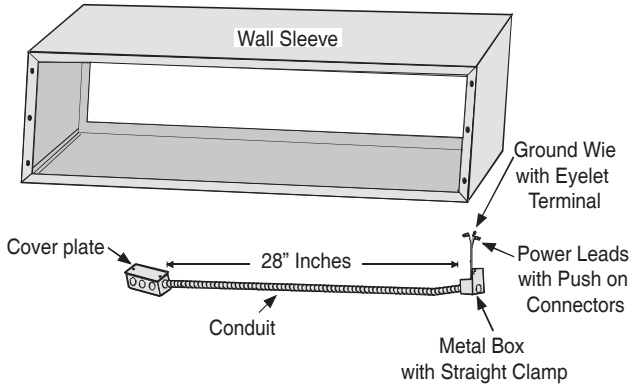


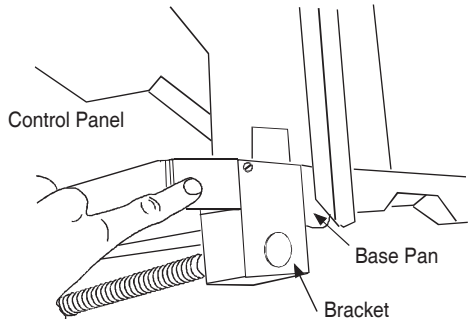
Hardwire Kit
AYHW101

Installation Procedure:

The Installation and servicing of the equipment should be performed by qualified and experienced personnel only.

1) At first, remove the cover plate from the junction box. Then, mount the junction box on the wall or floor within 28 inches (711mm) from the lower right corner of the wall sleeve so that the metal box is suitably clamped on the side of the sleeve as shown on the right below.
2) If a power switch is to be used, make sure the electrical connections are done and then mount the switch onto the junction box. During this operation, refer to the Power Switch Installation instructions.
3) Remove the control panel assembly by removing the two screws holding the control panel in place and then gently lift the panel. Disconnect the power cord leads from all electrical connections including the ground wire.
4) Remove the power cord clamp and the power cord from the unit.





5) For 265 volt units, remove and discard the red lead from the wire assembly.

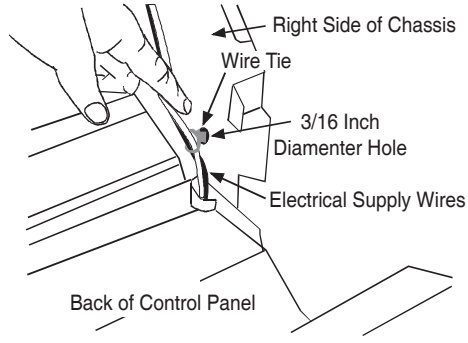
* For 208/230 volt units and 265 volt units refer to notes given below.

6) Remove the retaining ring, which holds the threaded conduit and the metal box together, from the straight conduit clamp. Insert the three wires into the metal box through one of the two openings in the box. Replace the hole cover grommet into the unused hole to prevent objects from entering the box.

7) After inserting the wires, replace the retaining ring back on the conduit clamp inside the metal box and tighten the ring securely so that it holds the conduit firmly.

8) The three wires extending from the metal box to the incoming power opening are inserted in such a way that approximately 20inches (508mm) of the wires protrude through the opening.

9) Attach the metal box to the chassis once again. Then, finally insert the wire tie into the 3/16 inch diameter located just above the incoming power opening. Tie all wires together securely with the wire tie as shown in the figure below.



265 Volt Units

a) After removing the red lead from the wire assembly, connect the black lead to the center terminal of the fuse holder.

b) Connect the white lead to the common (C) terminal of the capacitor and then connect the ground wire to the partition panel where the ground wire of the power cord was located earlier. For grounding, use the supplied ground screw (green color).

c) Then connect the white lead wire of the wire assembly at the junction box to the white lead of the field power source and similarly, connect the black lead of the wire assembly at the junction box to the black lead of the field power source. After that, connect the ground wire from the field power source to the ground wire of the wire assembly at the junction box.

d) Install the junction box cover plate and reinstall the control panel assembly.

1.2 Wired Wall Thermostat Connection Kit

The PTAC Wire Harness kit provides connection from terminal strip on the PTAC control board to the following board features:

- Front Desk Control
- Remote Fan (relay must be manufacturer-approved and have a AC low voltage coil)
- Remote Thermostat (confirm with manufacturer approved).

* If other than a "dry switch" is used in connecting these features, consult manufacturer before proceeding.

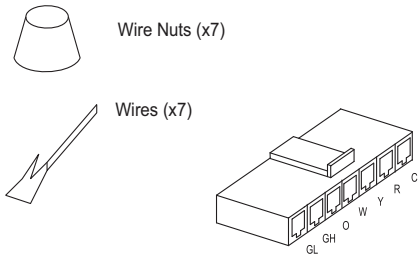
The PTAC Wire Harness kit contains the following:

1. 7-pin connector for a thermostat connection
   - C - Cormmon
   - R - 24VAC
   - Y - Compressor
   - W - E/Heater
   - O - Reversing Valve (only on PTHP)
   - GH - High Speed Fan
   - GL - Low Speed Fan

Note: If there is only one Fan connection(G), connect to either GH or GL depending on desired fan speed.

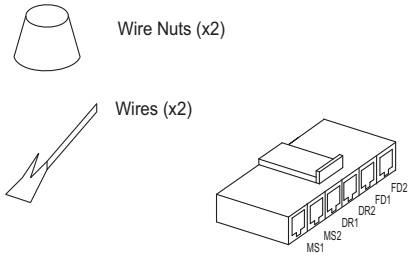
Do not wire the thermostat to energize heat pump and heat strips simultaneously as this will result in a wiring error.

Figure 1



2. 6-pin connector for the following options
   - FD1 – Front Desk Control
   - FD2 – Front Desk Control

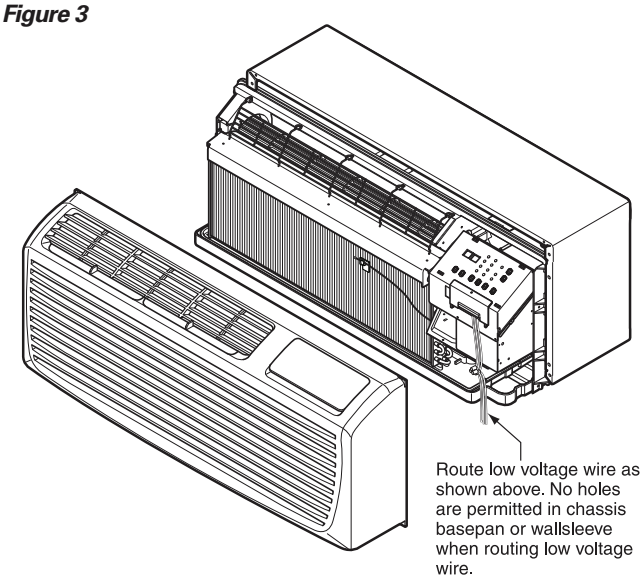
Figure 2



Installation

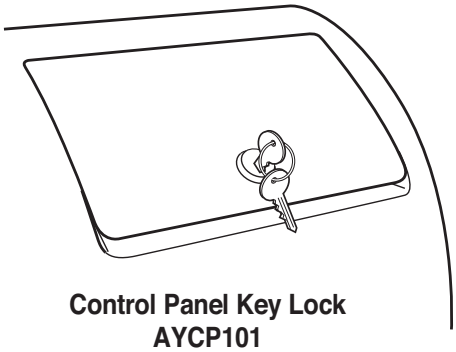
1. Disconnect power and remove the front panel per unit installation instruction.
2. Choose the feature desired and insert the proper jumper wire (included) into the appropriate slot on the housing.
3. Install the appropriate maleconnector header onto the matching on-board female connector.
4. Connect the kit wiring to the field wiring using the wire nuts (included). Route the kit wiring as shown in Figure 3. Do not run wires through basepan or wall

Figure 3

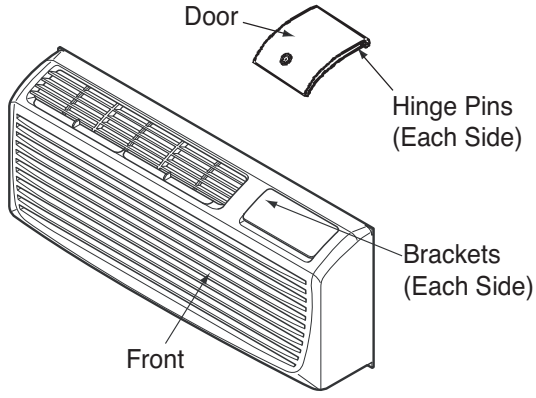


2. Mechanical Accessories

2.1 Control Panel Key Lock



Control Panel Key Lock
AYCP101

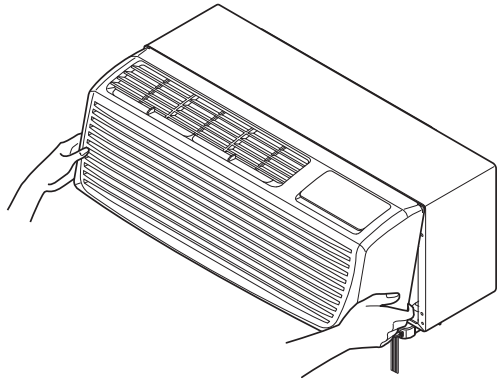


The Control Panel Key Lock Kit prevents tampering with the controls used to set the temperature and other Heating and Cooling functions.

Installation Procedure:

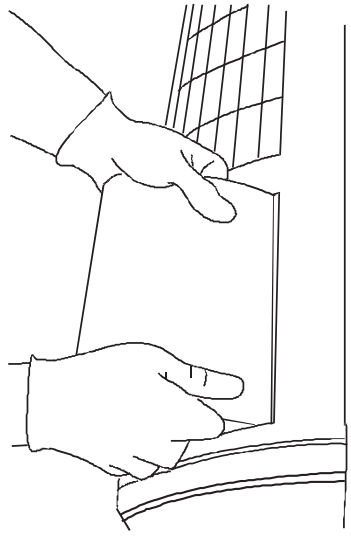
The Installation and servicing of the equipment should be performed by qualified and experienced personnel only.

1) Remove the Front Grille from the unit by pulling at the bottom on both sides and then lifting upwards as shown in the figure on the right.



2) Remove the existing cover assembly by lifting the cover halfway, using both hands and then slightly pull the cover hinge pins so that these pins slide out of the mating holes.

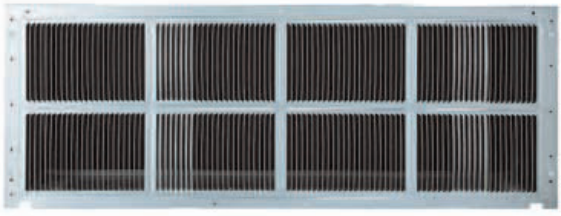
3) After removing the existing cover assembly, install the cover assembly with the key lock by applying slight pressure with both hands so that the cover hinge pins align properly onto the bracket.



2.2 Outer Grille

Outdoor Grilles are attached to the Wall Sleeve and exposed to the exterior Wall. These Grilles comes in industry standard size of 42" x 16". These Grilles are of two types :

(a) Stamped Aluminum Grille



Stamped Aluminum Grille
AYRGALA01

and (b) Architecture Grille.

Aluminum
AYAGALA01A

Soft Dove
AYAGALC01A

Dark Bronze
AYAGALB01A

Installation Procedure:

The Installation and servicing of the equipment should be performed by qualified and experienced personnel only.

(a) Stamped Aluminum Grille.

1) Prepare the wall sleeve for installation of the Grille by removing the cardboard stiffener and rear enclosure panel from the sleeve. These items may be removed from the inside of the room.

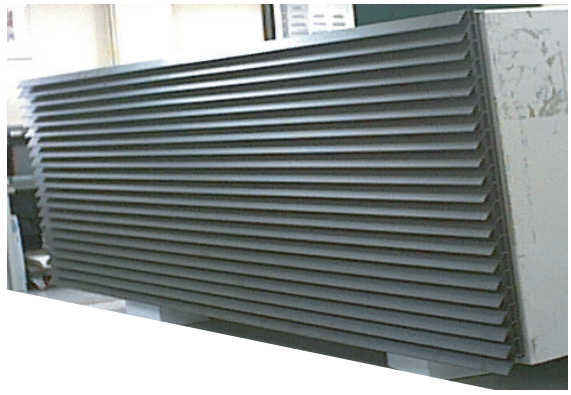
Note: *-*

The Sleeve stiffener must be taken out before the rear sleeve enclosure panel can be removed from the sleeve.

2) Prepare the stamped Aluminum Grille for installation on the sleeve by inserting the six plastic grommets into the square holes located near the outer edges of all the four sides of the Grille. Now with the Grille positioned so that the flanges of all the four sides are in the up position (at 90 degrees), insert the grommets in the opposite direction so that their square end protrudes through the grille through the flanges. The Grille is installed in such a way that it could be removed through the rear sleeve opening.
3) Install the stamped Aluminum Grille by aligning the guide pins located in the lower right and left hand corners of the Grille with the corresponding holes in the rear of the wall sleeve.
4) Secure the Grille by threading each of the screws into the plastic grommets.
5) Remove the wire handle from the center of the grille prior to installing the chassis into the sleeve.

(b) Architecture Grille.

1) Remove the cardboard stiffener and rear enclosure panel from the sleeve. These items may be removed from the inside of the room.
2) The Grille is installed in such a way that it could be removed through the rear end of the sleeve.
3) Install the Grille by aligning the four screws supplied to their corresponding holes in the architecture grille.
4) Secure the Grille to the sleeve by tightening the four screws to their corresponding holes in the Grille.
5) Remove the wire handle from the center of the Grille prior to installing the chassis into the sleeve.



The architectural design of a building may dictate the use of special or oversized louvers for aesthetic reasons. Louvers other than standard LG exterior grilles may be used on the LG unit, however, these special louvers, or any special exterior architectural treatments of the building facade that may restrict the free circulation of condenser airflow, should be referred to LG Engineering for evaluation and approval. The following guidelines should be followed in selecting a louver:

1. **The louver must have a minimum of 65% free area.**
   ASHRAE defines free area as the minimum area of the opening in an air inlet or outlet through which air can pass. Percent (%) free area equals the X dimension divided by the Y dimension.
2. The louver should be attached to the wall case in a manner that will prevent recirculation of condenser discharge air into the air inlet. If the louver is not attached directly to the wall case, a field-supplied splitter or gasket is required between the chassis and the louver to prevent recirculation. It is important that the above criteria be followed since a louver that is too restrictive or allows recirculation will reduce the unit's capacity and efficiency, increase the electrical current draw, cause intermittent operation due to the compressor overload protector shutting the compressor off, and cause failure of the compressor overload and shorten compressor life. Using the unit with a grille that is too restrictive or allows recirculation **may constitute improper installation and will void the unit's warranty.** A scale drawing of the louver section should be sent to LG Engineering Team. To assure the proper performance of the LG unit and comply with Underwriters Laboratories requirements, it may be necessary to send a sample louver section (at least 16" x 42") to an independent lab to be tested with the LG unit.

(c) Polymer Grill

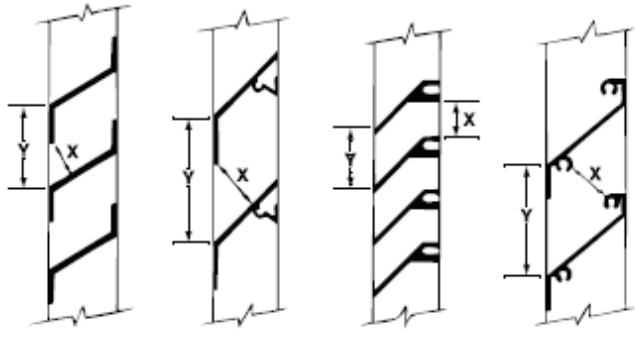
Model	Description
AYAGPLB01	Dark bronze Polymer Grille
AYAGPLD01	Soft dove Polymer Grille
AYAGPLC01	White Polymer Grille

Sample Calculations

Free Area (%)= $\frac{x}{y}$ x 100 x= 1" y= 1.5"

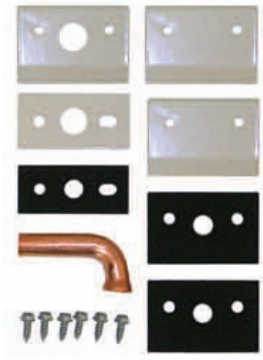
F.A %= $\frac{1}{1.5}$ x 100= 66.7%

AYAGPLB01/AYAGPLC01/AYAGPLD01



2.3 Condensate Drain Kit.

During the Heat Pump operation, condensate water inside the unit drains out into the sleeve from the chassis. Such an instance may also happen at times of high humidity during the cooling operation. When normal drainage from the wall sleeve is not possible or is undesirable, this condensate drain kit can be used.
There are two types of condensate drain kits:
(a) Outdoor drain kit and
(b) Indoor drain kit.



Condensa te Drain Kit
AYDR101

Installation Procedure:

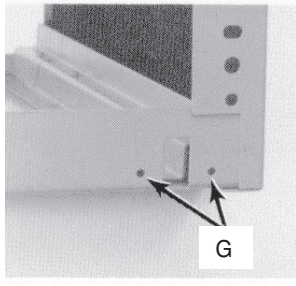
The Installation and servicing of the equipment should be performed by qualified and experienced personnel only.

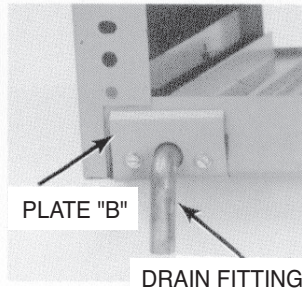
(a) Outdoor drain kit

Before installing the outdoor Grille, it must be determined if the optional outdoor wall sleeve drain kit is to be installed. The drain kit will allow the condensate from the outdoor and indoor coils to be routed to a suitable area and the kit can be installed so that the condensate can be drained from the right or left hand side of the wall sleeve.

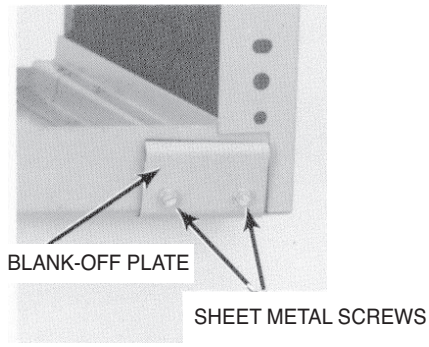
1) At first remove the rear enclosure panel and the sleeve stiffener. These items may be removed from the inside of the room.

2) The drain fitting can be installed either on the right or on the left hand side of the sleeve. (Illustration is only for the right hand installation) Insert the drain fitting in the opening of gasket A and hole of plate B. Secure this assembly to the rear of the sleeve with two sheet metal screws into holes G in the sleeve as shown in the figure on the right.





3) Locate the other gasket A on the back of the bank off plate and secure the assembly to the left rear of the wall sleeve with sheet metal screws provided.(refer to figure on the right)



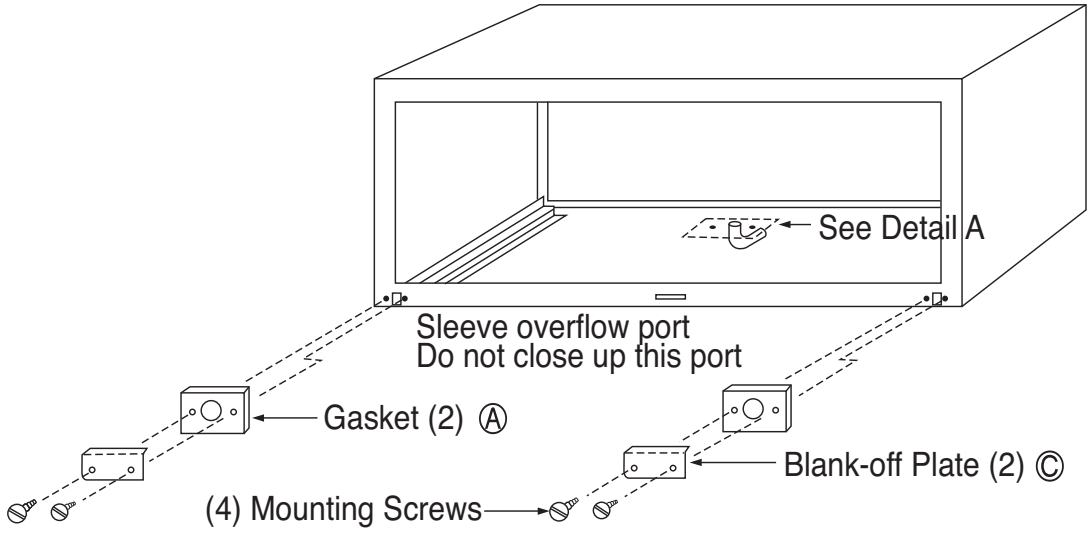
If the unit is to be installed right away, install the condenser grille to the wall sleeve with the hardware provided. See the condenser grille installation instructions.

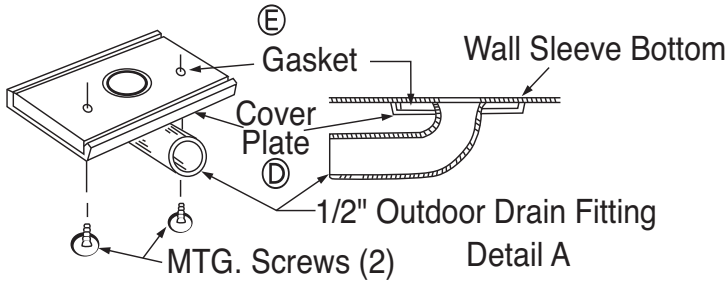
If the unit is not to be installed right away, replace the rear enclosure panel in the wall sleeve. This will help protect the inside of the building from weather damage.

And if a subbase is used, be sure to remove the right hand subbase cover before installation of the chassis into the sleeve. Then finally, slide the chassis into the wall sleeve until it comes in contact with the flanges.

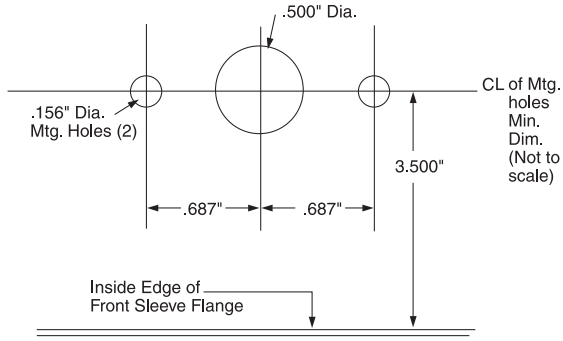
(b) Indoor drain kit.

The internal drain kit is installed when the condensate is to be drained into the drain system inside the building. This drain kit is installed on the bottom of the wall sleeve. The components of this kit are shown in the figure below :-





1) The components D, E and the drain fitting of the kit are mounted on the bottom of the wall sleeve prior to the installation of the sleeve. When a subbase is not used, a suitable area on the bottom of the sleeve is selected which is inside the room. And when a subbase is installed, the drain should be installed at a minimum of 3 – 1/2 inches from the front flange of the wall sleeve. A minimum clearance should be provided for the subbase as shown in the figure on the right.
2) Cut out the template in the lower right hand corner of the sleeve to locate the field drilled holes. See detail A on the last page on how the components have to be installed after the holes are drilled in the bottom of the wall sleeve. If the drain fitting is not connected to an indoor drainage system immediately after the wall sleeve is installed, then it must be plugged with a cork to prevent indoor water spilling in case of rain.



An indoor tube or hose must be installed on the drain fitting and inter connected to the drain system inside the building. Install the two blank off plates C and gaskets A on the outdoor portion(flange) of the wall sleeve as shown in the figure on the last page. These components may be installed after the wall sleeve is secured in the wall opening just prior to the installation of the condenser grille and chassis.

2.4 Leveling legs

IMPORTANT: Installer is responsible for complying with all building and National Electrical Codes.

Leveling Leg Accessory Kits include two leveling legs as well as two mounting screws.
They are constructed of formed sheet metal and are engineered to provide accurate leveling and support for PTAC units which do not utilize the optional subbase. They are adjustable from 3 1/4" to 5 1/2". See Figure 1.

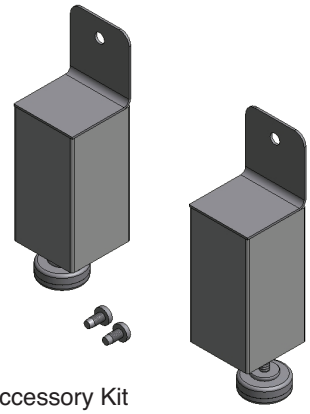


FIGURE 1
Leveling Leg Accessory Kit
AYLL101A

Step 1 - Locate Leveling Legs flush with the front of the Wall Sleeve. See Figure 2.

Step 2 - Using the Leveling Leg as a template, drill a 1/8" diameter hole for each leg in opposite sides of the Wall Sleeve.

Step 3 - Adjust Leveling Legs to the approximate height required and install them with the screws provided. Do not over tighten screws.

Step 4 - Level the Wall Sleeve horizontally from side-to-side.
Then provide a slight slope (1/4 bubble in the sight glass) toward the exterior of the building. Do not allow sleeve to slope toward the room.

Step 5 - Install PTAC unit. Check again to make sure sleeve is still sloping toward the outside.
Adjust Leveling Legs as needed to ensure slope as explained in Step 4. Connect power to the unit.

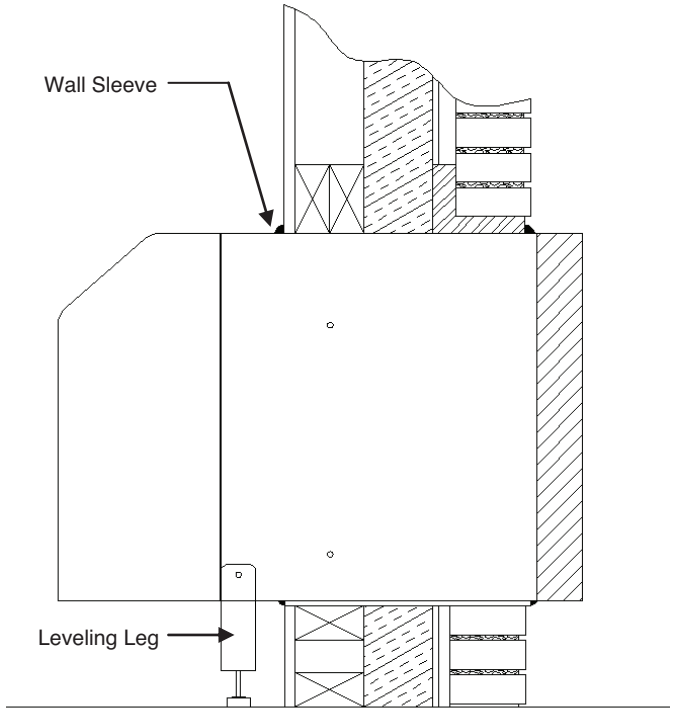


FIGURE 2 - Leveling Leg Installed on Wall Sleeve

2.5 Subbase

The Subbase provides an enclosure for an electrical receptacle, power switch and a circuit breaker. Electrical connections to the power supply from the unit are made inside the subbase. In addition, the subbase provides structural support to the Wall Sleeve and to the weight of the PTAC unit .

The Subbase kit consists of two leveling legs for sleeve support and an accurate unit for leveling during installation. Also, the subbase is pre-wired and is grounded by means of a grounding screw.

Part No.: AYSB1101(230/208V 20A)
AYSB2101(230/208V 30A)
AYSB3101(265V 20A)

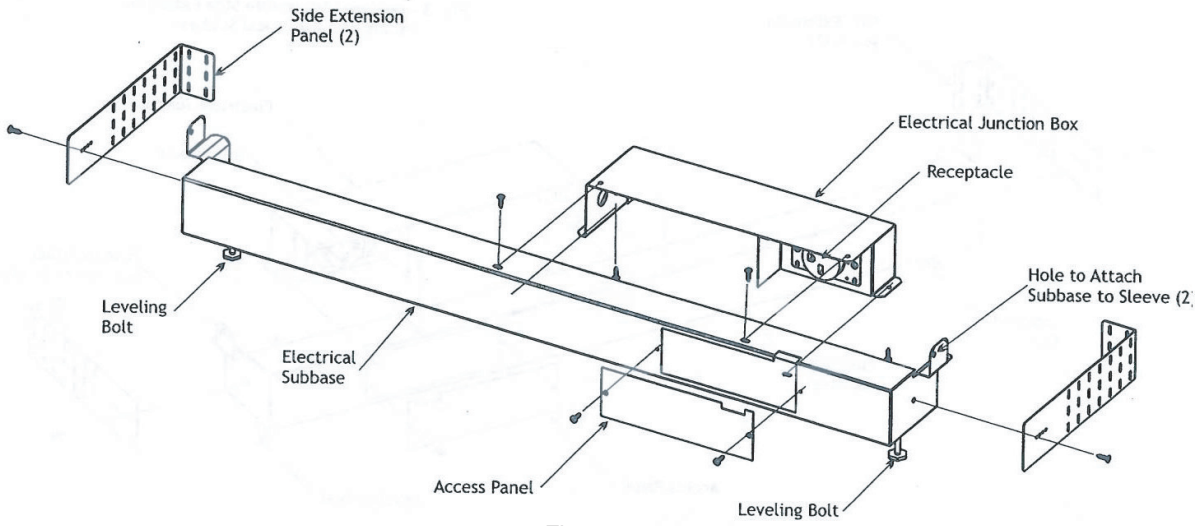


Figure 1

Note: -

When using a subbase, the wall sleeve must be installed at a minimum height of 3 – 1/4 inches (83mm) above a finished floor and at a minimum distance of 2 – 3/4 inches(70mm) from a finished wall.

Installation Procedure:

1. Disconnect all power to unit.
2. Mark the hole location on sleeve then drill 1/8in holes. See Fig. 2 for hole dimensions on sleeve.
3. (Optional) Adjustable side extension panels can be attached to cover open space left between subbase and wall.
4. Attach side extension panels to subbase using one black screw on each side so that panel end extends dimensions from the subbase.
5. Bring power into the subbase electrical junction box using one of the knockouts for conduit connections.

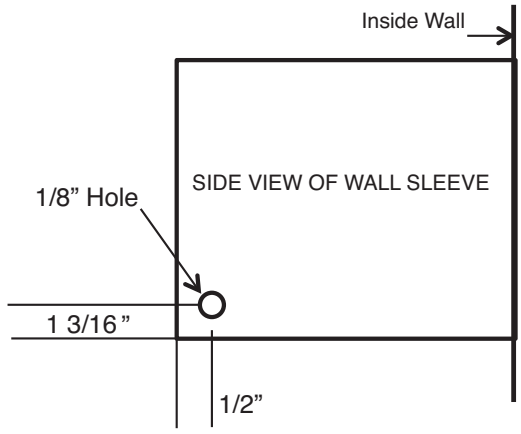


Figure 2

6. Take electrical junction box cover off and use field supplied wire nuts to connect power to receptacle wires. See Figure 3.

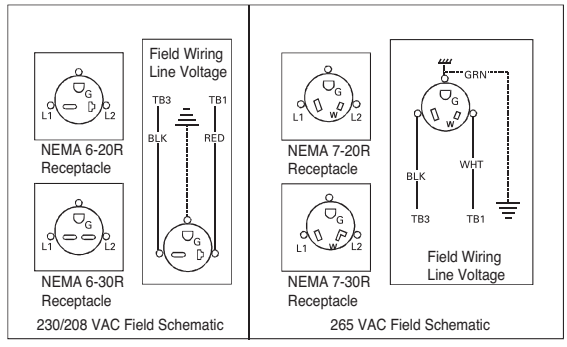


Figure 3

7. Attach subbase to wall sleeve. Subbase has side tabs for mounting the subbase to sleeve. Be sure hole on the side tab is lined up with the pre drilled hole on side of sleeve. Once holes are aligned, attach subbase to sleeve with one one screw on each side. See Figure 4.
8. Level subbase flush with floor by adjusting leveling bolts beneath each end of subbase.
9. Remove the right access cover from the subbase and plug the power cord into receptacle. Route power cord out of subbase through cord notch in subbase.
10. Restore power to unit.

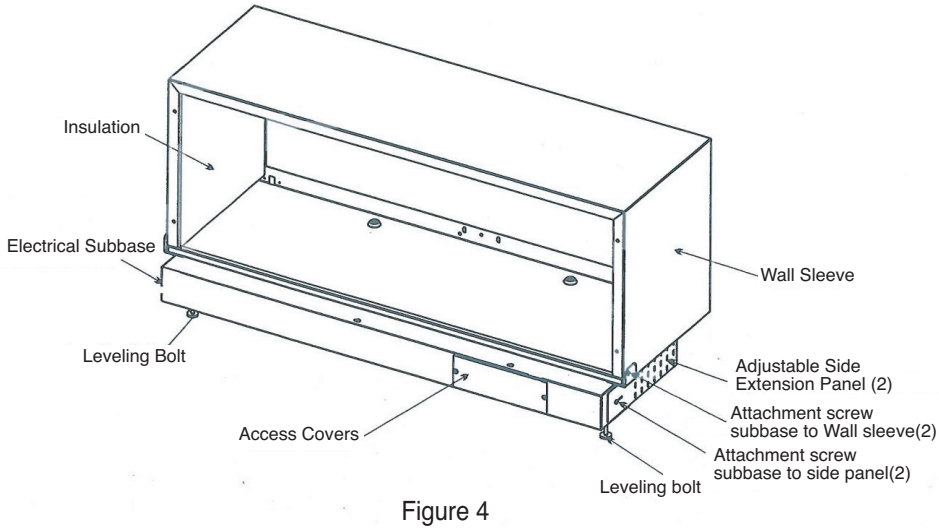


Figure 4

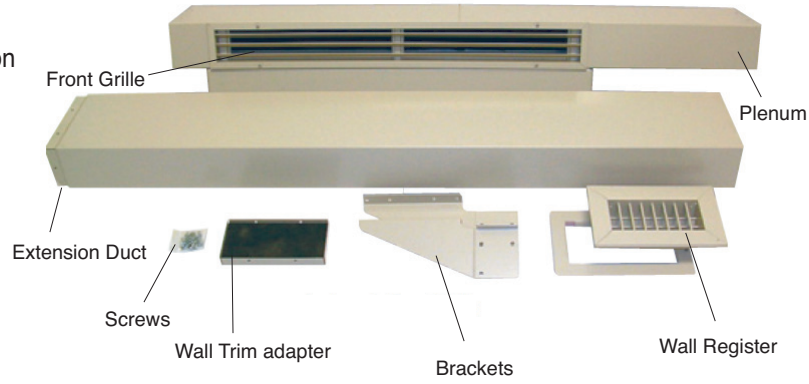
2.6 Lateral Duct Accessory System

The lateral duct accessory system allows one unit to heat or cool two rooms and can be installed for left or right side duct application.

Pre-Installation

Things to take into consideration before installation

- Extension duct maximum length is 4 feet.
- Duct cannot contain any bends or turns
- Recommended: minimum of 6inches of clearance between unit and adjoining wall.
- Provisions must be made for return air from the adjoining room.



Lateral Duct System AYLD1A

General

The lateral Duct Accessory Kit allows one PTAC unit to heat or cool two rooms. The kit mounts to the wall sleeve and can be installed for either right or left side duct applications. The amount of air that can be diverted to an adjoining room is adjustable from 20 to 30 percent. (See Table 1)

Baffle position	Unit front	Adjacent room
Position 1(factory default)	80%	20%
Position 2	75%	25%
Position 3	70%	30%

Installation

1. Mark hole location to drill 1/8inch 3 holes in wall sleeve.(see Fig1.)
2. Drill 1/8inch 3 holes.

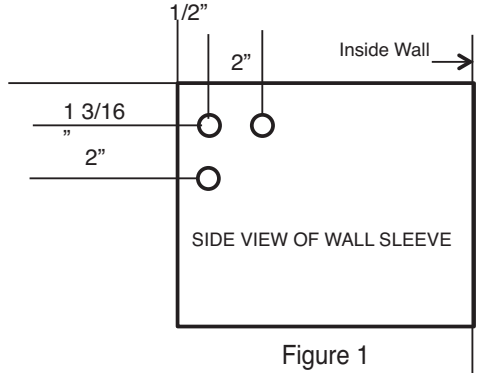
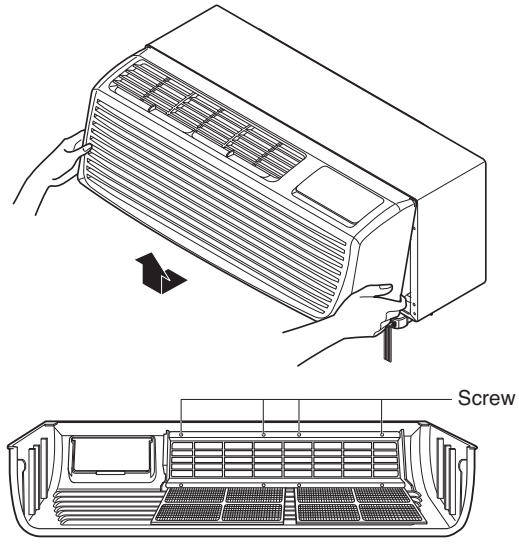


Figure 1

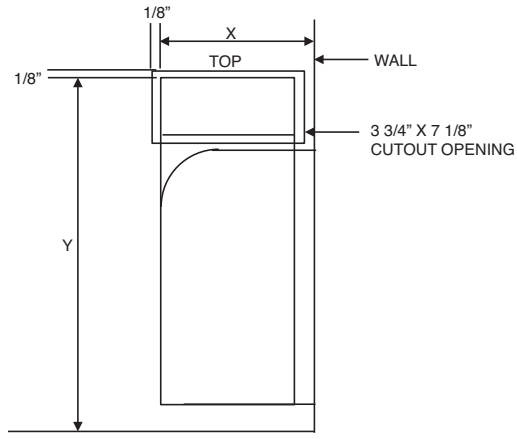
Remove Air Discharge Grille from Front Panel

1. Remove the front panel by firmly grasping the bottom on both sides, pull forward and then upward to release the latches.
2. Remove discharge grille by removing four screws from inside of front panel.
3. Replace front panel.



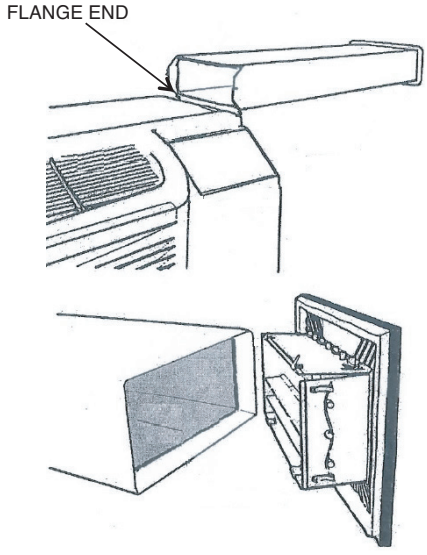
Install the Extension Duct

1. Temporarily secure plenum to left and right support brackets that were previously installed.
2. Measure and cut a 3 3/4 in. X 7 1/8 in. hole through adjacent wall(fig.2)
3. Install wall trim adapter. Double-sided tape works well.
4. Now measure from mounting hole in support bracket to wall suface of adjacent room.
5. From ftanged end of the extension duct measure to the length from above.
6. Cut the extension duct. Note: Final length of duct may be flush with the wall or up to 1/2 inch short.
7. Trim insulation 1 1/2 in. for the installation of wall register as illustrated.
8. Mount extension duct by sliding it into installed wall trim adapter, secure ftanged with provided scews.



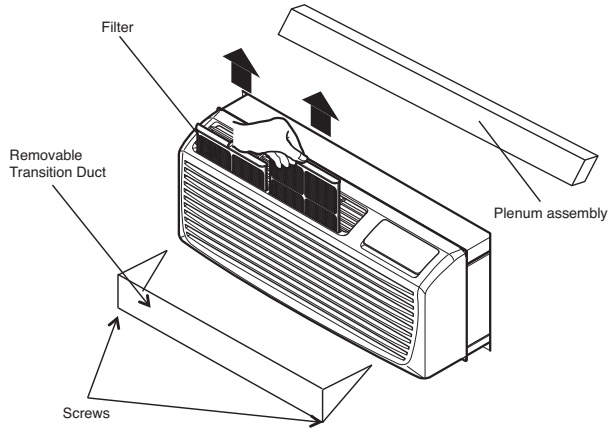
Install Plenum to Unit

1. Using provided screws, install end cap on plenum.
2. Line up the plenum to the extension duct and support bracket secure with provided screws.



Filter Cleaning

1. To clean unit filters remove the transition duct
2. To remove transition duct remove two screws from the end of duct.



2.7 Replacement Filter (10 Pack)

The unit is provided with two easy-to-use replaceable mesh filters which can be cleaned periodically from time to time.

Replacement Filter 10-Pack
AYFT110

2.8 Wall Sleeve

This Wall Sleeve comes in industry standard size of 42" x 16"

These Wall Sleeves are fitted firmly onto the wall. The Air Conditioner unit is slid onto it and held firmly to position by this Wall Sleeve which acts as its support. Installation of a wall sleeve allows flexibility to the PTAC unit.

Installation Procedure:

The Installation and servicing of the equipment should be performed by qualified and experienced personnel only.

1) For installing the Wall Sleeve, a wall opening 42 x 16 – 1/4 x 13 – 3/4 inch required.

For Details please refer to the Design and Installation part for installation of the Wall Sleeve.

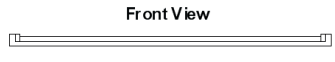
42" Wall Sleeve
AYSVB01A

2.9 Folding Wall Sleeve

These instruction cover the installation of a standard metal wall sleeve through masonry, steel or wood frame walls, Fasteners are field supplied. The sleeve is shipped disassembled. It must be field assembled prior to installation.

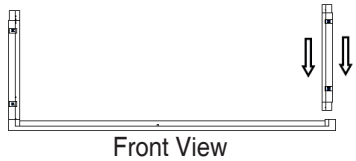
Installation Procedure:

Step 1 Set Bottom Panel on a clean flat and level surface.

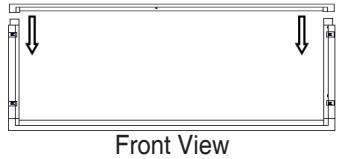


Step 2 Locate Left Side Panel. Align panel in the Left Bottom Panel slot. Fully insert Left Panel into Bottom Panel until locking tabs engage.

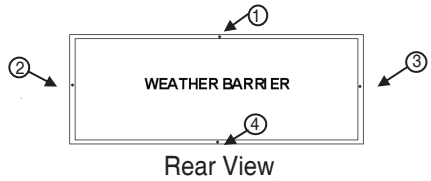
Step 3 Locate Right Side Panel. Align panel in the Right Bottom Panel slot. Fully insert Right Panel into Bottom Panel until locking tabs engage.



Step 4 Locate Top Panel and align with top of Right and Left Side Panels. Fully insert Top Panel into Right and Left Side Panels until locking tabs engage.



Step 5 (If required) Locate Weather Barrier and attach to the rear of the assembled sleeve with four (4) supplied push pins.

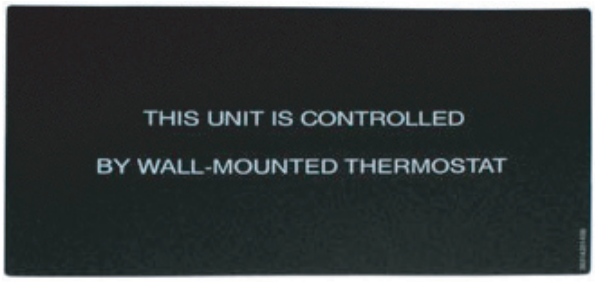


Rear View

2.10 Remote Escutcheon Kit

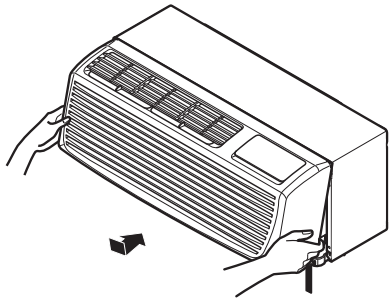
This kit provides an attractive replacement escutcheon, (see Figure 1). The kit allows the removal of control pads and graphics, which are not required when a wall thermostat is used to control the unit.

Figure 1 - Standard Escutcheon



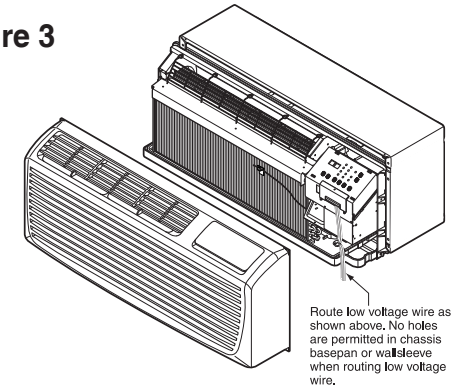
Escutcheon AYEK101

Figure 2



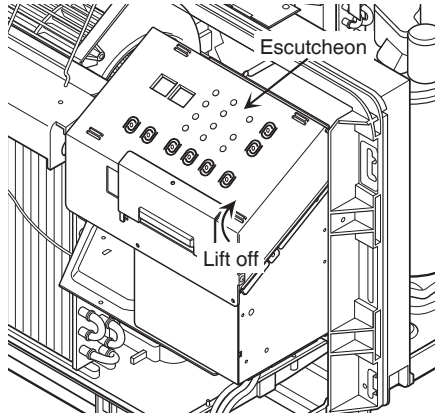
1. Grasp the cabinet front as shown in Figure 2.
2. Pull the bottom of the cabinet front away from the chassis until the retaining clips disengage as in Figure 3.
3. Lift the cabinet front off the chassis.
4. Lift the front edge of the escutcheon as shown in figure 4.

Figure 3



5. Replace the standard escutcheon with new one from control panel.

Figure 4



2.11 Vent Filter

The Vent filter is used to filter the air flowing inside the room when Air Ventilation is performed by means of the ventilation lever.

Installation Procedure:

The Installation and servicing of the equipment should be performed by qualified and experienced personnel only.

Before cleaning the vent filter, disconnect power to the unit by unplugging the power cord at the wall outlet or subbase, or disconnect power at the fuse box or circuit breaker. If unit is operated with vent door closed, the vent filter does not need to be cleaned.

1. Remove the cabinet front grille as described in Front Grille Removal.
2. Remove the 4 screws securing the chassis to the wall sleeve with a Phillips-Head screwdriver.
3. Slide the chassis out of the wall sleeve far enough so that the vent filter is accessible as shown in Figure A.
4. Remove the vent filter by unscrewing the two screws at the top of the filter and gently pulling the filter away from the partition panel. Refer to Figure B.
5. Clean and replace the filter by reattaching the hook to the bottom of the vent door and replacing the two screws, slide the chassis back into the wall sleeve, secure it in place with 4 screws and reinstall the front cabinet.

Note:

Vent filter supplied as SVC Part not as an accessories part. Vent Filter can requested by Part Number 5230A20016A

Figure A – Vent (Left side of unit)

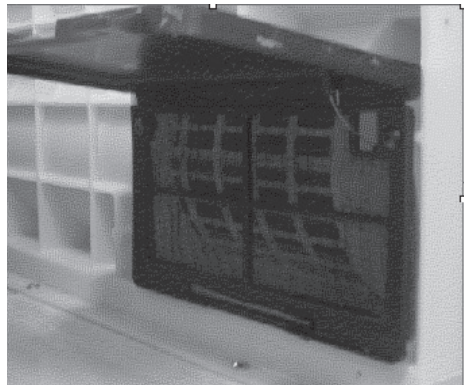
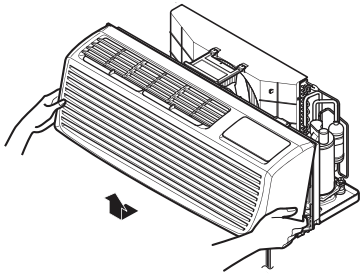


Figure B – Vent Filter Removal

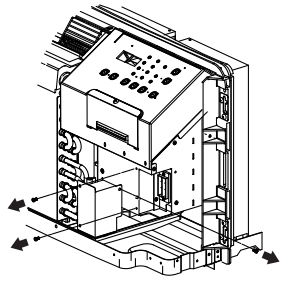
3.1Power cord

FOR 230/208 VOLT POWER CORD CONNECTIONS ONLY

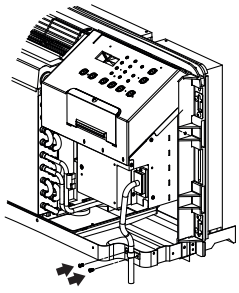
1. Remove the front gille by pulling it out at the bottom to release it, then lift it up along the unit top front.



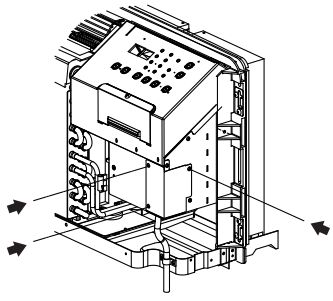
2. Remove cover by removing 3 screws from front.



3. Connect accessory power supply cord, and fix power cord to basepan with screws.



4. Replace cover with screws. Tighten securely.



ELECTRIC HEATER RATING
(CONFIGURATION BASED ON POWER CORD)

POWER CORD	VOLTAGE	HEATER WATTS	HEATER CURRENT	MAX. FUSE SIZE	MIN.CIRCUIT AMPACITY
AYUH2115	230/208	2 400/2 300 W	10.5/11.2 A	15 A	14.5 A
AYUH2120	230/208	3 300/3 200 W	14.5/15.5 A	20 A	19.8 A
AYUH2130	230/208	4 700/4 600 W	20.6/22.3 A	30 A	28.3 A

Nomenclature

Global standard

[Old version]

Model Development serial number.

Heater Capacity:

0kW: No Heater	2kW: 2.0 ~ 2.9	4kW : 4.0 ~ 4.9	U: Universal Heater
1kW: 1.0 ~ 1.9	3kW: 3.0 ~ 3.9	5kW : 5.0 ~ 5.9	

Function.

A: Cooling Standard	H: Heat Pump Standard
B: Cooling + Corrosion Protection	J: Heat Pump + Corrosion Protection
C: Cooling + Condensate Pump	K: Heat Pump + Condensate Pump
E: Electronic	

Look.

L: LG

Chassis : A – YA chassis.

Power Rating:

1: 115V, 60Hz	6: 220-240V, 50Hz	E: 265V, 60Hz
2: 220V, 60Hz	7: 110V, 50-60Hz	
3: 208-230V, 60Hz	8: 380-415V, 50Hz	
5: 200-220V, 50Hz	9: 380-415V, 60Hz	

Cooling/Heating Capacity.

Ex) 07 -> 7,000 Btu/h Class

Model Type:

C: Cooling + Electric Heater or Cooling only.
H: Heat pump + Electric Heater or Heat Pump only.

W: Window Air Conditioner	U: SPVU Air Conditioner
Y: Packaged Terminal Air Conditioner	L: Console Air Conditioner
X: Through the Wall Air Conditioner	Q: Low Profile Air Conditioner
E: Casement Air Conditioner	

Production Center, Refrigerant

L: Changwon R22	N: India
A: Changwon R410A	Z: Brazil
C: Changwon R407C	D: Indonesia
T: China	M: Mexico
K: Turkey R22	V: Vietnam
E: Turkey R410A	S: Outsourcing
H: Thailand	U: China R410A

LG
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http://www.lgeaircon.com

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